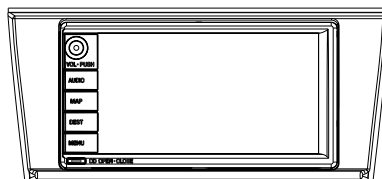


# Service Manual

FORD



AVX-MG2037ZF/XN/UC

ORDER NO.  
**CRT3093**

RECEIVER ASSY WITH NAVIGATION DISPLAY

# AVX-MG2037ZF<sub>XN/UC</sub>

# AVX-MG2137ZF<sub>XN/UC</sub>

# AVX-MG2237ZF<sub>XN/UC</sub>

# AVX-MG2337ZF<sub>XN/UC</sub>

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-951	CRT2872	G2	CD Mech. module:Circuit Description, Mech.Description, Disassembly



For details, refer to "Important symbols for good services".

## ● CD Player Service Precautions

1. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
2. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment shorting-solder by referring to “the DISASSEMBLY” on page 120.
3. After replacing the pickup unit, be sure to check the grating. (See p.108.)

A

VEHICLE	DISTINATION	PRODUCED AFTER	OEM PARTS No.	ID No.	PIONEER MODEL No.
LINCOLN LS	U.S.A. , CANADA	October 2003	4W4T-18K931-C	•••••	AVX-MG2037ZF/XN/UC
LINCOLN TOWNCAR	U.S.A. , CANADA	October 2003	4W1T-18C985-C	•••••	AVX-MG2137ZF/XN/UC
LINCOLN NAVIGATOR	U.S.A. , CANADA	October 2003	4L7T-18C985-D	•••••	AVX-MG2237ZF/XN/UC
LINCOLN AVIATOR	U.S.A. , CANADA	October 2003	4C5T-18C985-D	•••••	AVX-MG2337ZF/XN/UC

B

C

D

# SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

## [ Important symbols for good services ]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely. When you find the procedures bearing any of the symbols, be sure to fulfill them:

### 1. Product safety



You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

### 2. Adjustments



To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

### 3. Cleaning



For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

### 4. Shipping mode and shipping screws



To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

### 5. Lubricants, glues, and replacement parts



Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount. For replacement parts or tools, the prescribed ones should be used.

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# 1. SPECIFICATIONS

## General

Power source . . . . . 14.4V(10.5V-16.0V allowable) DC  
Grounding system . . . . . Negative type  
Backup current. . . . . 3mA or less  
Dimensions(AVX-MG2037ZF)246(W) x112(H) x188(D)mm  
(AVX-MG2137ZF) 191(W) x109(H) x185(D)mm  
(AVX-MG2237ZF) 201(W) x109(H) x183(D)mm  
(AVX-MG2337ZF) 201(W) x109(H) x183(D)mm  
Weight . . . . . 2.7kg

## CD player

System. . . . . Compact disc audio system  
Usable discs . . . . . Compact disc  
Signal format. . . . . Sampling frequency : 44.1kHz  
. . . . . Number of quantization : 16;linear  
S/N. . . . . 75dB or more  
Distortion . . . . . 0.1% or less

## FM tuner

Frequency . . . . . 87.75, 87.9–107.9 MHz  
S/N. . . . . 58dB or more  
Distortion . . . . . 1.5% or less  
IF interference . . . . . 95dB or more  
Image interference. . . . . 45dB or more  
Stereo Separation . . . . . 25dB or more(400Hz)

## AM tuner

Frequency . . . . . 530–1710 kHz  
S/N 20dB usable sensibility . . . . . 33dB $\mu$   $\pm$  6dB  
S/N. . . . . 50dB +10dB, -6dB  
Distortion . . . . . 1.0% or less  
IF interference . . . . . 75dB or more  
Image interference. . . . . 60dB or more

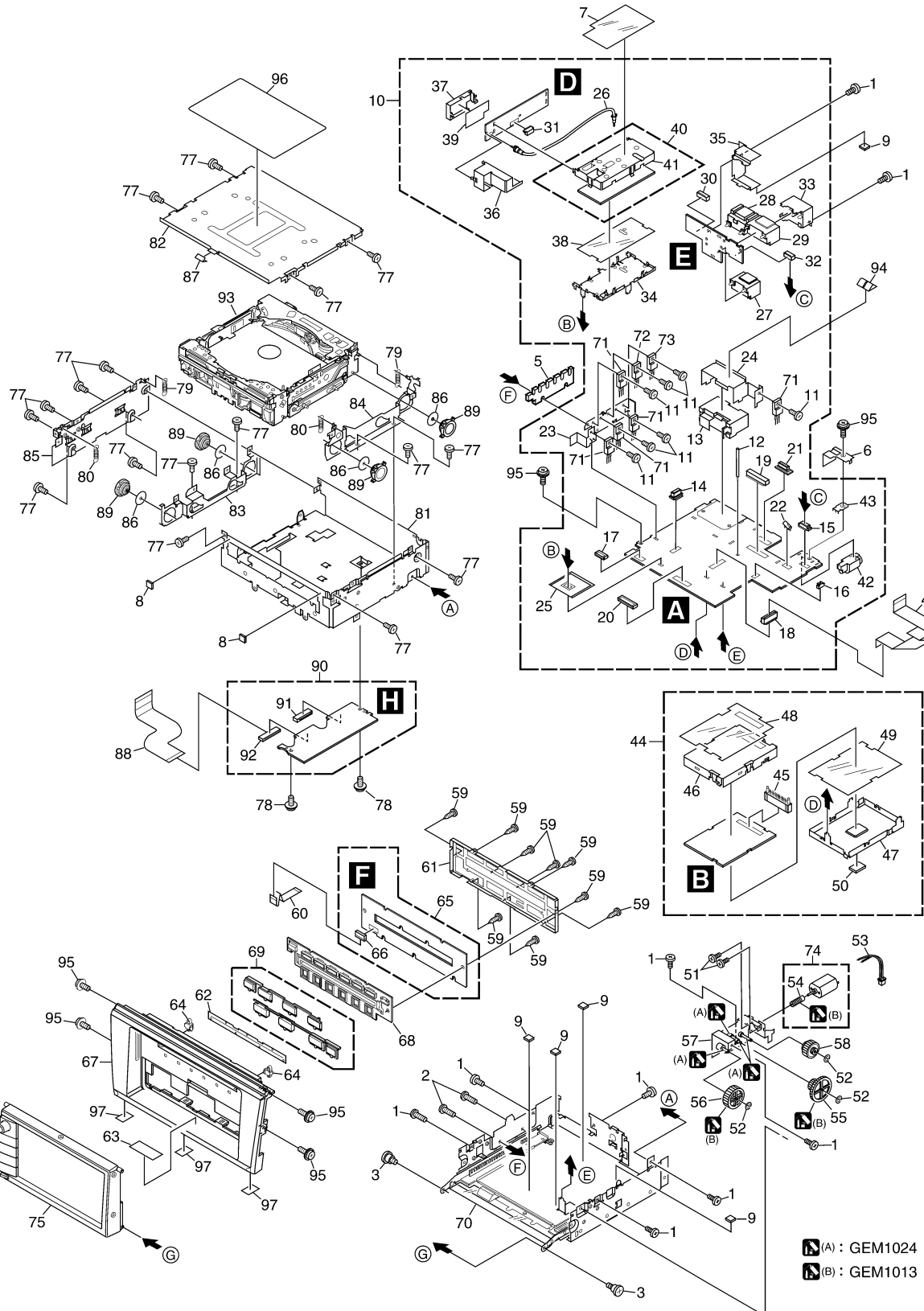
## Display

Screen size/Aspect ratio. . . . . 6.5 inch wide/16:9  
(effective display area). . . . . 143.4 x 79.3 mm  
Pixels . . . . . 93,600(400 x 234)  
Sub pixels . . . . . 280,800(1200 x 234)  
Type . . . . . TFT active matrix  
Color system. . . . . NTSC compatible

## 2. EXPLODED VIEWS AND PARTS LIST

NOTES : • Parts marked by " \* " are generally unavailable because they are not in our Master Spare Parts List.  
 • Screw adjacent to ▽ mark on the product are used for disassembly.  
 • For the applying amount of lubricants or glue, follow the instructions in this manual.  
 (In the case of no amount instructions, apply as you think it appropriate.)

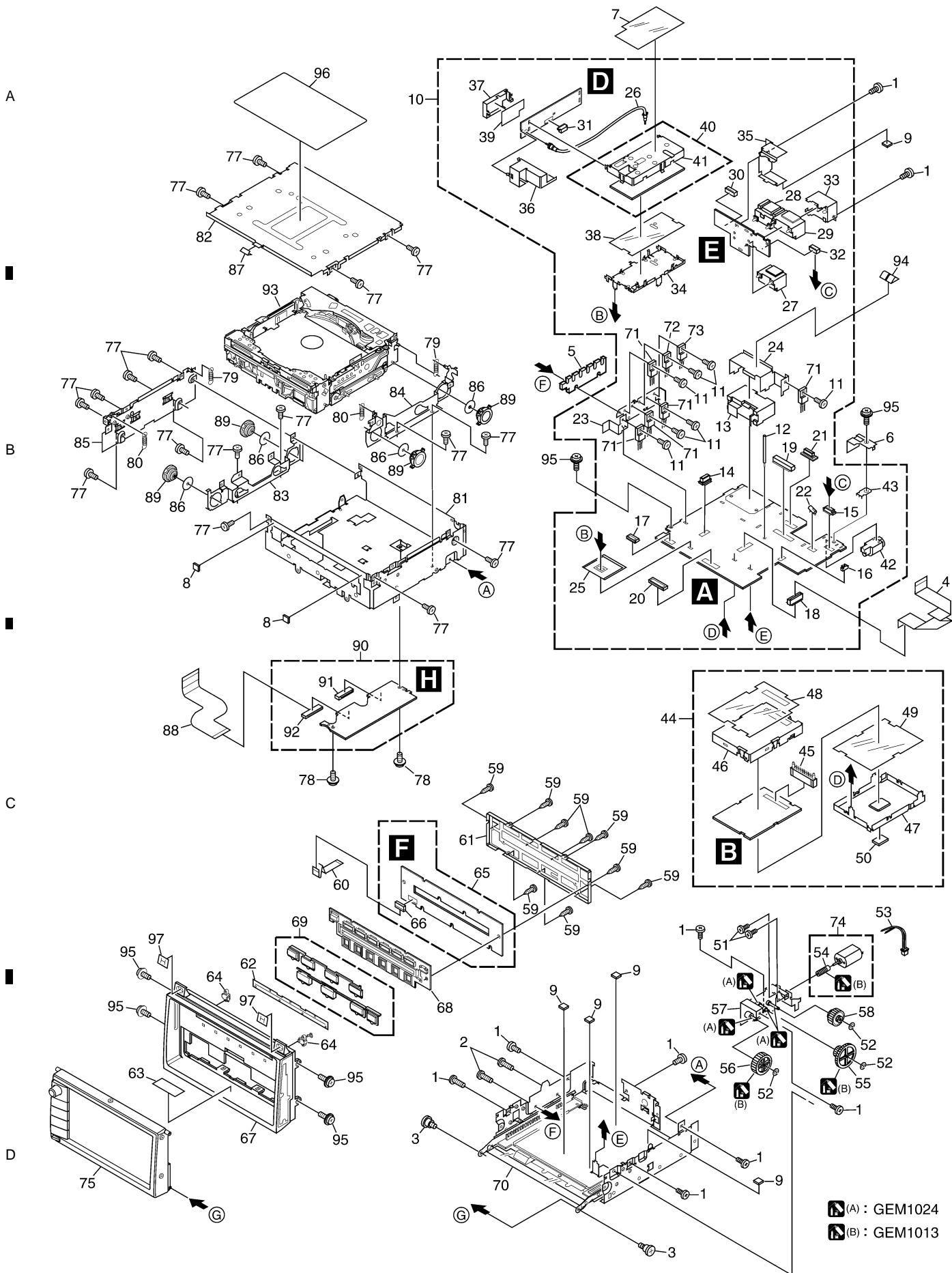
### 2.1 EXTERIOR(1)(AVX-MG2037ZF)



# EXTERIOR(1)(AVX-MG2037ZF) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	Screw	BMZ26P040FTC	51	Screw	BMZ20P025FTC	
2	Screw	BMZ26P080FTC	52	Washer	CBF1039	
3	Screw(M2x2)	CBA1735	53	Connector	CDE6704	
4	Connector	CDE6618	54	Gear	CNV5296	A
5	Heat Sink	CNC9449	55	Gear	CNV5297	
6	Shield	CNC9995	56	Gear	CNV5298	
7	Insulator	CNM7884	57	Holder Unit	CXB7342	
8	Spacer	CNM7885	58	Torque Limiter Unit	CXB8742	
9	Cushion	CNM7904	59	Screw	BPZ20P060FTC	
10	Tuner Audio Unit	CWM9102	60	Connector	CDE6619	
11	Screw(M2.6x6)	CBA1732	61	Holder	CNC9435	
12	Clamper	CEF1034	62	Cover	CNM7367	
13	Connector(CN901)	CKM1349	63	Cushion	CNM7905	
14	Connector(CN404)	CKS2811	64	Lighting Conductor	CNV6802	
15	Connector(CN904)	CKS2811	65	Panel PCB Unit	CWM7801	
16	Connector(CN905)	CKS3124	66	Connector(CN1801)	CKS3965	
17	Connector(CN751)	CKS3810	67	Panel Unit	CXB7756	B
18	Connector(CN907)	CKS3859	68	Housing Unit	CXB9194	
19	Connector(CN551)	CKS3982	69	Button Unit	CXB9373	
20	Connector(CN771)	CKS4052	70	Chassis Frame Assy	CXC2108	
21	Connector(CN906)	CKS4065	71	Transistor(Q351,752,905,909,913)	2SB1185	
22	Connector(CN403)	CKX1044	72	Transistor(Q902)	2SB1299	
23	Holder	CNC9439	73	Transistor(Q912)	2SB1299	
24	Holder	CNC9440	74	Motor Unit(M901)	CXC1191	
25	Shield	CNM7725	* 75	Grille Assy	CXC2124	
26	Connector	CDH1311	76	.....		
27	Connector(CN2802)	CKM1346	77	Screw	BMZ26P040FTC	
28	Connector(CN2803)	CKM1347	78	Screw(M2x2.5)	CBA1624	
29	Connector(CN2804)	CKM1348	79	Spring(Black)	CBH2482	
30	Connector(CN2801)	CKS4066	80	Spring(Silver)	CBH2481	
31	Connector(CN1402)	CKS4515	81	Chassis	CNA2414	C
32	Connector(CN2805)	CKS4515	82	Case	CNB2758	
33	Holder	CNC9441	83	Bracket	CNC9443	
34	Holder	CNC9442	84	Bracket	CNC9601	
35	Holder	CNC9599	85	Holder	CNC9612	
36	Shield	CND1151	86	Sheet	CNM5981	
37	Shield	CND1152	87	Sheet	CNM7731	
38	Insulator	CNM7291	88	Flexible PCB	CNP7328	
39	Insulator	CNM7860	89	Damper	CNV6608	
40	FM/AM Tuner Unit	CWE1635	90	Control Unit(G2F)	CWX2589	
41	Holder	CNC8855	91	Connector(CN601)	CKS1956	
42	Antenna Jack(CN401)	HKX1054	92	Connector(CN101)	CKS4512	
43	Terminal(CN402)	VNF1084	93	Service Mechanism Unit(G2AVX)	CXX1657	
44	DSP Unit	CWM7805	94	Stick Finger	DNB1092	D
45	Connector(CN1001)	CKS3981	95	Screw	IMS26P050FTC	
46	Shield	CNC9444	96	Label	CRW1462	
47	Shield	CNC9445	97	Sheet	CNM8173	
48	Insulator	CNM7289				
49	Insulator	CNM7290				
50	Conductor	CNM7728				

## 2.2 EXTERIOR(1)(AVX-MG2137ZF)





# EXTERIOR(1)(AVX-MG2137ZF) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	Screw	BMZ26P040FTC	51	Screw	BMZ20P025FTC	
2	Screw	BMZ26P080FTC	52	Washer	CBF1039	
3	Screw(M2x2)	CBA1437	53	Connector	CDE6704	
4	Connector	CDE6618	54	Gear	CNV5296	A
5	Heat Sink	CNC9449	55	Gear	CNV5297	
6	Shield	CNC9995	56	Gear	CNV5298	
7	Insulator	CNM7884	57	Holder Unit	CXB7342	
8	Spacer	CNM7885	58	Torque Limiter Unit	CXB8742	
9	Cushion	CNM7904	59	Screw	BPZ20P060FTC	
10	Tuner Audio Unit	CWM9103	60	Connector	CDE6619	
11	Screw(M2.6x6)	CBA1732	61	Holder	CNC9435	
12	Clamper	CEF1034	62	Cover	CNM7367	
13	Connector(CN901)	CKM1349	63	Cushion	CNM7905	
14	Connector(CN404)	CKS2811	64	Lighting Conductor	CNV6802	
15	Connector(CN904)	CKS2811	65	Panel PCB Unit	CWM7801	
16	Connector(CN905)	CKS3124	66	Connector(CN1801)	CKS3965	
17	Connector(CN751)	CKS3810	67	Panel Unit	CXB7757	B
18	Connector(CN907)	CKS3859	68	Housing Unit	CXB9194	
19	Connector(CN551)	CKS3982	69	Button Unit	CXB9374	
20	Connector(CN771)	CKS4052	70	Chassis Frame Assy	CXC2110	
21	Connector(CN906)	CKS4065	71	Transistor(Q351,752,905,909,913)	2SB1185	
22	Connector(CN403)	CKX1044	72	Transistor(Q902)	2SB1299	
23	Holder	CNC9439	73	Transistor(Q912)	2SB1299	
24	Holder	CNC9440	74	Motor Unit(M901)	CXC1191	
25	Shield	CNM7725	* 75	Grille Assy	CXC2125	
26	Connector	CDH1311	76	.....		
27	Connector(CN2802)	CKM1346	77	Screw	BMZ26P040FTC	
28	Connector(CN2803)	CKM1347	78	Screw(M2x2.5)	CBA1624	
29	Connector(CN2804)	CKM1348	79	Spring(Black)	CBH2482	
30	Connector(CN2801)	CKS4066	80	Spring(Silver)	CBH2481	
31	Connector(CN1402)	CKS4515	81	Chassis	CNA2414	C
32	Connector(CN2805)	CKS4515	82	Case	CNB2758	
33	Holder	CNC9441	83	Bracket	CNC9443	
34	Holder	CNC9442	84	Bracket	CNC9453	
35	Holder	CNC9599	85	Holder	CNC9438	
36	Shield	CND1151	86	Sheet	CNM5981	
37	Shield	CND1152	87	Sheet	CNM7731	
38	Insulator	CNM7291	88	Flexible PCB	CNP7328	
39	Insulator	CNM7860	89	Damper	CNV7328	
40	FM/AM Tuner Unit	CWE1635	90	Control Unit(G2F)	CWX2589	
41	Holder	CNC8855	91	Connector(CN601)	CKS1956	
42	Antenna Jack(CN401)	HKX1054	92	Connector(CN101)	CKS4512	
43	Terminal(CN402)	VNF1084	93	Service Mechanism Unit(G2AVX)	CXX1657	
44	DSP Unit	CWM7805	94	Stick Finger	DNB1092	D
45	Connector(CN1001)	CKS3981	95	Screw	IMS26P050FTC	
46	Shield	CNC9444	96	Label	CRW1462	
47	Shield	CNC9445	97	Insulator	CNM8116	
48	Insulator	CNM7289	98	Insulator	CNM8126	
49	Insulator	CNM7290				
50	Conductor	CNM7728				

C

D

 (A) : GEM1024  
 (B) : GEM1013

(1)EXTERIOR(1)(AVX-MG2237ZF,AVX-MG2337ZF) SECTION PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	Screw	BMZ26P040FTC	50	Conductor	CNM7728	
	2	Screw	BMZ26P080FTC				
	3	Screw(M2x2)	CBA1735	51	Screw	BMZ20P025FTC	
	4	Connector	CDE6618	52	Washer	CBF1039	
	5	Heat Sink	CNC9449	53	Connector	CDE6704	
				54	Gear	CNV5296	A
	6	Shield	CNC9995	55	Gear	CNV5297	
	7	Insulator	CNM7884				
	8	Spacer	CNM7885	56	Gear	CNV5298	
	9	Cushion	CNM7904	57	Holder Unit	CXB7342	
	10	Tuner Audio Unit	See Contrast table(2)	58	Torque Limiter Unit	CXB8742	
				59	Screw	BPZ20P060FTC	
	11	Screw(M2.6x6)	CBA1732	60	Connector	CDE6619	
	12	Clamper	CEF1034				
	13	Connector(CN901)	CKM1349	61	Holder	CNC9435	
	14	Connector(CN404)	CKS2811	62	Cover	CNM7367	
	15	Connector(CN904)	CKS2811	63	Cushion	CNM7905	
				64	Lighting Conductor	CNV6802	
	16	Connector(CN905)	CKS3124	65	Panel PCB Unit	CWM7806	
	17	Connector(CN751)	CKS3810				
	18	Connector(CN907)	CKS3859	66	Connector(CN1801)	CKS3965	
	19	Connector(CN551)	CKS3982	67	Panel Unit	CXB7758	
	20	Connector(CN771)	CKS4052	68	Housing Unit	CXB9194	
				69	Button Unit	CXB9768	
	21	Connector(CN906)	CKS4065	70	Chassis Frame Assy	CXC2112	B
	22	Connector(CN403)	CKX1044				
	23	Holder	CNC9439	71	Transistor(Q351,752,905,909,913)	2SB1185	
	24	Holder	CNC9440	72	Transistor(Q902)	2SB1299	
	25	Shield	CNM7725	73	Transistor(Q912)	2SB1299	
				74	Motor Unit(M901)	CXC1191	
	26	Connector	CDH1311	* 75	Grille Assy	CXC2126	
	27	Connector(CN2802)	CKM1346				
	28	Connector(CN2803)	CKM1347	76	*****		
	29	Connector(CN2804)	CKM1348	77	Screw	BMZ26P040FTC	
	30	Connector(CN2801)	CKS4066	78	Screw(M2x2.5)	CBA1624	
				79	Spring(Black)	CBH2482	
	31	Connector(CN1402)	CKS4515	80	Spring(Silver)	CBH2481	
	32	Connector(CN2805)	CKS4515				
	33	Holder	CNC9441	81	Chassis	CNA2414	
	34	Holder	CNC9442	82	Case	CNB2758	
	35	Holder	CNC9599	83	Bracket	CNC9443	
				84	Bracket	See Contrast table(2)	
	36	Shield	CND1151	85	Holder	See Contrast table(2)	C
	37	Shield	CND1152				
	38	Insulator	CNM7291	86	Sheet	CNM5981	
	39	Insulator	CNM7860	87	Sheet	CNM7731	
	40	FM/AM Tuner Unit	CWE1635	88	Flexible PCB	CNP7328	
				89	Damper	CNV6608	
	41	Holder	CNC8855	90	Control Unit(G2F)	CWX2589	
	42	Antenna Jack(CN401)	HKX1054				
	43	Terminal(CN402)	VNF1084	91	Connector(CN601)	CKS1956	
	44	DSP Unit	CWM7805	92	Connector(CN101)	CKS4512	
	45	Connector(CN1001)	CKS3981	93	Service Mechanism Unit(G2AVX)	CXX1657	
				94	Stick Finger	DNB1092	
	46	Shield	CNC9444	95	Screw	IMS26P050FTC	
	47	Shield	CNC9445				
	48	Insulator	CNM7289	96	Label	CRW1462	
	49	Insulator	CNM7290	97	Insulator	See Contrast table(2)	

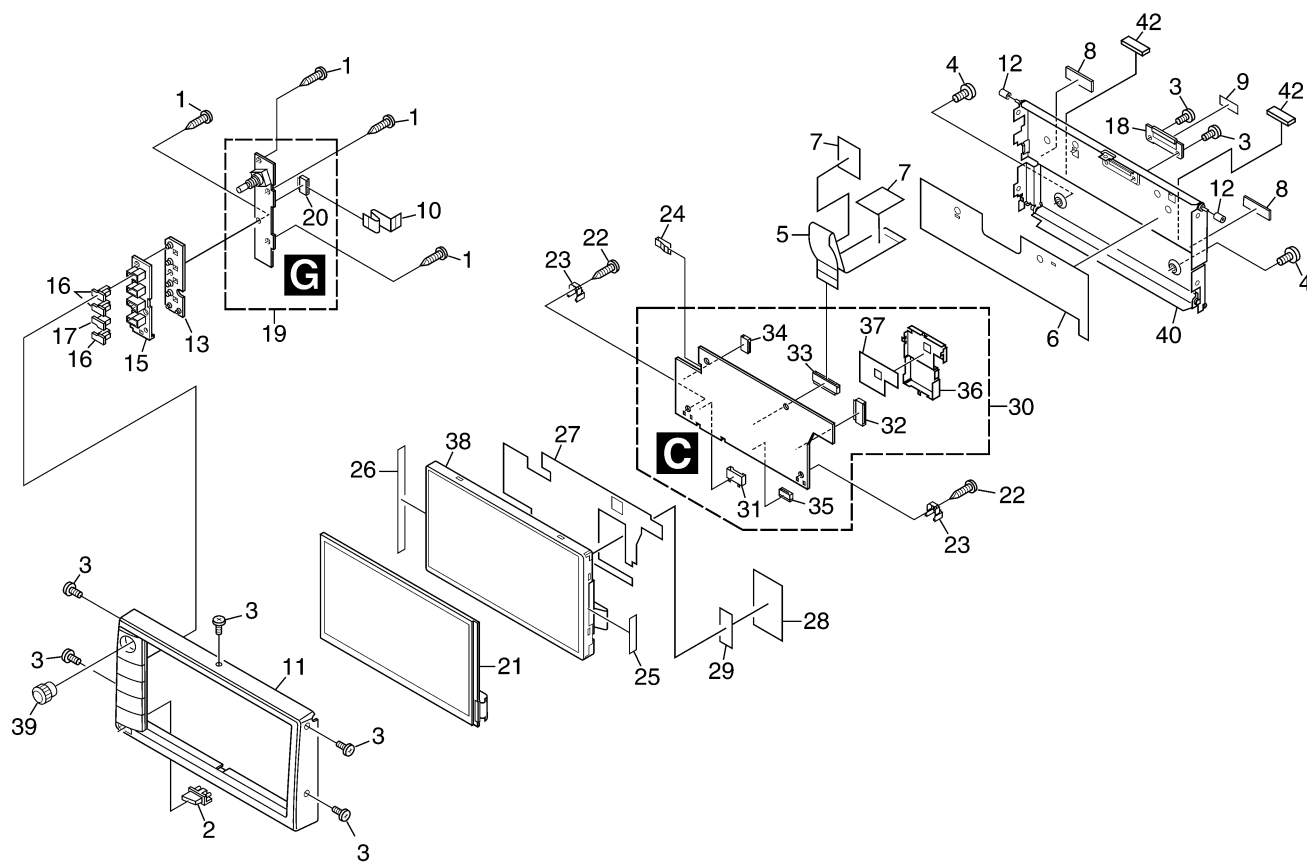
(2) CONTRAST TABLE

AVX-MG2237ZF and AVX-MG2337ZF are constructed the same except for the following:

Mark	NO	Symbol and Description	AVX-MG2237ZF	AVX-MG2337ZF
	10	Tuner Audio Unit	CWM9104	CWM9105
	84	Bracket	CNC9453	CNC9601
	85	Holder	CNC9438	CNC9612
	97	Insulator	CNM8126	Not used

## 2.4 EXTERIOR(2)(AVX-MG2037ZF,AVX-MG2137ZF)

A



C

D



## (1)EXTERIOR(2)(AVX-MG2037ZF,AVX-MG2137ZF) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BPZ20P080FTC	22	Screw	BPZ20P050FTC
2	Button(OPEN/CLOSE)	See Contrast table(2)	23	Holder	CNC9456
3	Screw(M2x1.925)	CBA1736	24	Earth	CND1003
4	Screw(M2.6x2.5)	CBA1737	25	Sheet	CNM7473
5	Connector	CDE6620			
6	Insulator	CNM7302	26	Sheet	CNM7648
7	Cover	CNM7720	27	Insulator	CNM7862
8	Cushion	CNM7727	28	Insulator	CNM7863
9	Sheet	CNM7886	* 29	Double Faced Tape	CNM7991
10	Flexible PCB	CNP6330	30	Module Unit	CWM9123
11	Grille Unit	See Contrast table(2)	31	Connector(CN4161)	CKS3192
12	Roller	CNV6198	32	Connector(CN4301)	CKS3991
13	Rubber	CNV6749	33	Connector(CN4001)	CKS4132
14	•••••		34	Connector(CN4201)	CKS4212
15	Housing	CNV6754	35	Connector(CN4202)	CKS4510
16	Lighting Conductor	CNV6864	36	Shield	CNC9457
17	Lighting Conductor	CNV6865	37	Insulator	CNM7303
18	Guide	CNV7234	38	LCD Module	CWX2898
19	Keyboard Unit	CWM7802	39	Knob Unit	See Contrast table(2)
20	Connector(CN1851)	CKS4212	40	Case Unit	CXC2114
21	Touch Panel	CWX2710	41	•••••	
			42	Cushion	CNM8451

## (2) CONTRAST TABLE

AVX-MG2037ZF and AVX-MG2137ZF are constructed the same except for the following:

Mark	NO	Symbol and Description	AVX-MG2037ZF	AVX-MG2137ZF
	2	Button(OPEN/CLOSE)	CAC7032	CAC7037
	11	Grille Unit	CXC3156	CXC3157
	39	Knob Unit	CXC2116	CXC2117

1 2 3 4

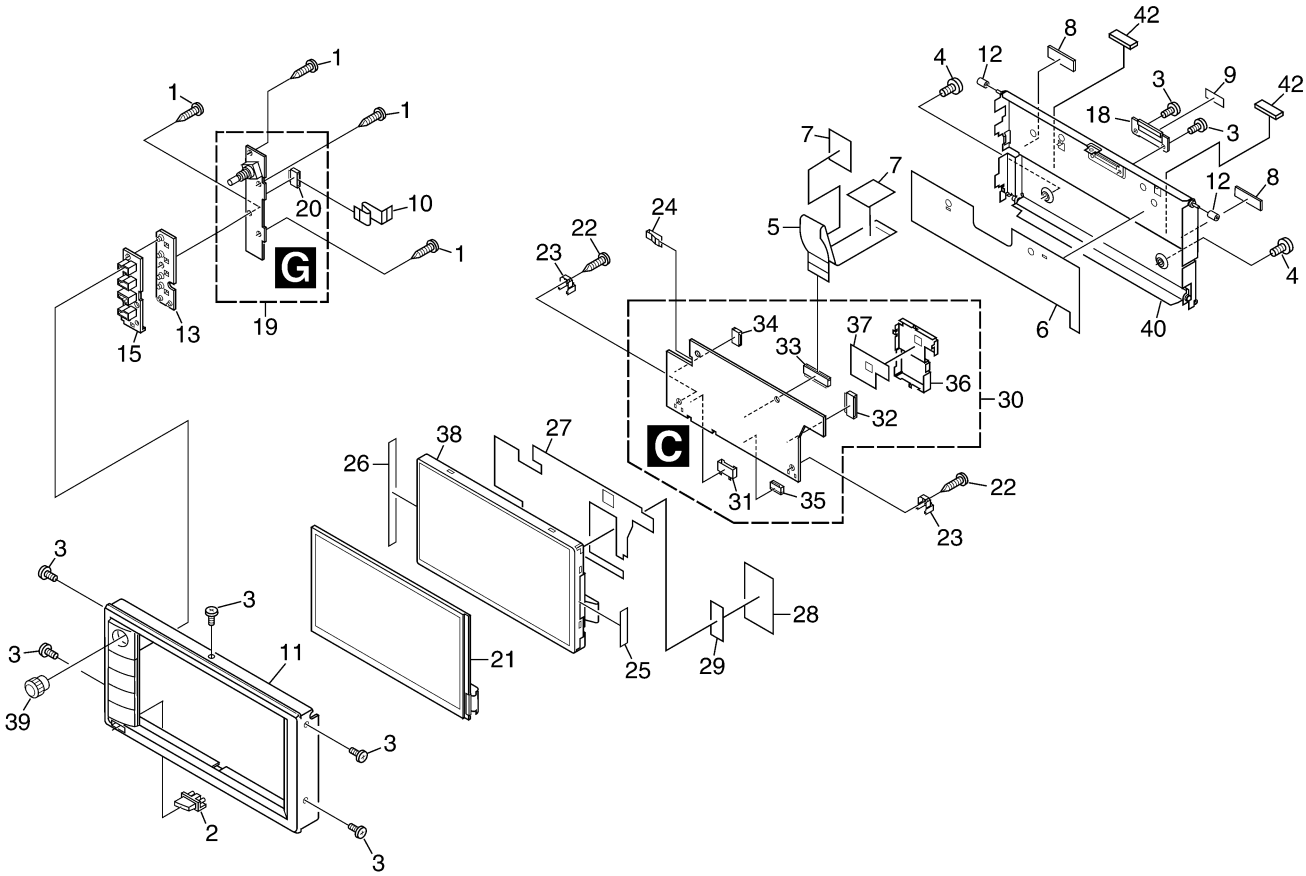
# 2.5 EXTERIOR(2)(AVX-MG2237ZF,AVX-MG2337ZF)

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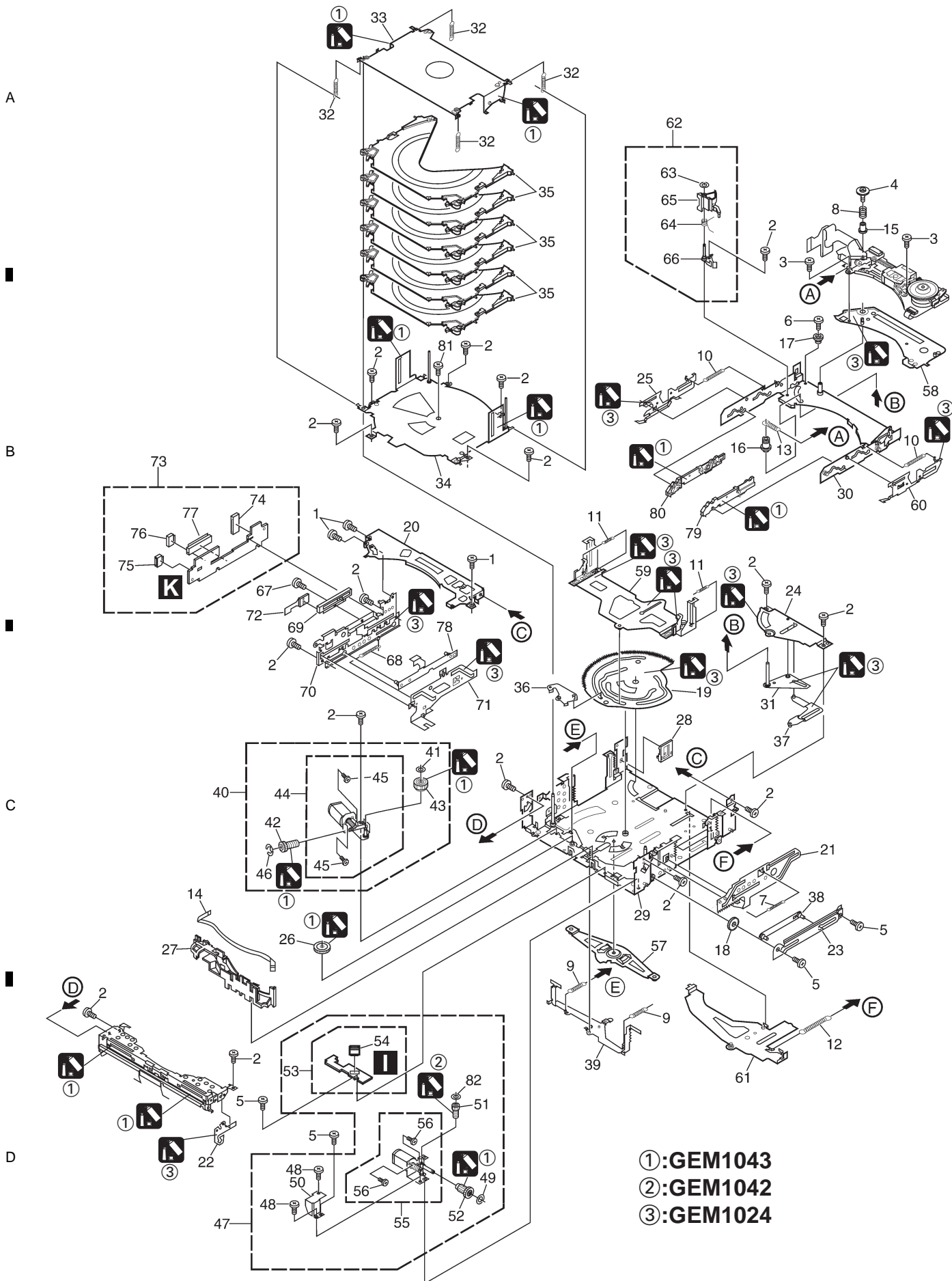
D



(1)EXTERIOR(2)(AVX-MG2237ZF,AVX-MG2337ZF) SECTION PARTS LIST

<u>Mark</u>	<u>No.</u>	<u>Description</u>	<u>Part No.</u>
	1	Screw	BPZ20P080FTC
	2	Button(OPEN/CLOSE)	CAC7817
	3	Screw(M2x1.925)	CBA1736
	4	Screw(M2.6x2.5)	CBA1737
	5	Connector	CDE6620
	6	Insulator	CNM7302
	7	Cover	CNM7720
	8	Cushion	CNM7727
	9	Sheet	CNM7886
	10	Flexible PCB	CNP6330
	11	Grille Unit	CXC3158
	12	Roller	CNV6198
	13	Rubber	CNV6749
	14	*****	
	15	Housing	CNV7287
	16	*****	
	17	*****	
	18	Guide	CNV7234
	19	Keyboard Unit	CWM7807
	20	Connector(CN1851)	CKS4212
	21	Touch Panel	CWX2710
	22	Screw	BPZ20P050FTC
	23	Holder	CNC9456
	24	Earth	CND1003
	25	Sheet	CNM7473
	26	Sheet	CNM7648
	27	Insulator	CNM7862
	28	Insulator	CNM7863
*	29	Double Faced Tape	CNM7991
	30	Module Unit	CWM9123
	31	Connector(CN4161)	CKS3192
	32	Connector(CN4301)	CKS3991
	33	Connector(CN4001)	CKS4132
	34	Connector(CN4201)	CKS4212
	35	Connector(CN4202)	CKS4510
	36	Shield	CNC9457
	37	Insulator	CNM7303
	38	LCD Module	CWX2898
	39	Knob Unit	CXC2118
	40	Case Unit	CXC2115
	41	*****	
	42	Cushion	CNM8451

## 2.6 SERVICE MECHANISM UNIT(G2AVX)(1)



# SERVICE MECHANISM UNIT(G2AVX)(1) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	Screw	BMZ20P020FZB				
2	Screw	BMZ20P025FTC	51	Gear	CNV6634	
3	Screw(M2x2)	CBA1556	52	Gear	CNV6635	
4	Screw(M2x2.5)	CBA1626	53	PCB Unit(LED)	CWX2614	
5	Screw(M2x2.5)	CBA1609	* 54	Connector(CN31)	CKS4523	A
			55	Motor Unit(-B)(M2)	CXC1145	
6	Screw(M2x4.5)	CBA1629				
7	Spring	CBH2460	56	Screw	JFZ20P020FTC	
8	Spring	CBH2461	* 57	Arm Unit	CXC1653	
9	Spring	CBH2484	58	Bracket Unit	CXC1654	
10	Spring	CBH2694	* 59	Lever Unit	CXC2159	
			* 60	Lever Unit	CXC1659	
11	Spring	CBH2486				
12	Spring	CBH2668	* 61	Lever Unit	CXC1660	
13	Spring	CBH2500	62	Arm Assy	CXB8822	
14	Connector	CDE6698	63	Washer	CBF1038	
15	Collar	CLA4329	64	Spring	CBH2489	
			65	Arm	CNV6735	
16	Collar	CLA4330				
17	Collar	CLA4331	66	Bracket Unit	CXC1652	
18	Gear	CND1649	67	Screw	BMZ20P025FTC	B
* 19	Cam Gear	CND1650	68	Spring	CBH2667	
20	Frame	CND1651	69	Volume(VR1)	CCW1023	
			70	Bracket	CND1652	
21	Steer	CND1655				
22	Arm	CND1657	71	Steer	CND1656	
23	Bracket	CND1658	72	Flexible PCB	CNP6368	
* 24	Bracket	CND1660	73	PCB Unit(SIDE)	CWX2613	
* 25	Lever	CNC9953	74	Connector(CN12)	CKS3991	
			* 75	Connector(CN14)	CKS4404	
26	Gear	CNV6612				
27	Holder	CNV6740	76	Connector(CN13)	CKS4525	
28	Holder	CNV6738	77	Connector(CN11)	CKS4572	
* 29	Chassis Unit	CXC1642	78	Lever Unit	CXC1645	
* 30	Frame Unit	CXC1643	* 79	Lever Unit	CXB9121	
			* 80	Lever Unit	CXB9122	
* 31	Arm Unit	CXC1647				C
32	Spring	CBH2670	81	Screw	JFZ20P020FTC	
33	Holder Unit	CXC1669	82	Washer	CBF1037	
34	Holder Unit	CXC1668				
35	Tray Unit	CXB6930				
36	Lever Unit	CXC1648				
* 37	Lever Unit	CXC1649				
38	Lever Unit	CXC1650				
* 39	Lever Unit	CXC1651				
40	Cam Motor Assy	CXB7522				
41	Washer	CBF1064				
42	Gear	CNV6610				
43	Gear	CNV6611				
44	Motor Unit(-A)(M1)	CXC1144				
45	Screw	JFZ20P020FTC				D
46	Washer	YE20FUC				
47	ELV Motor Assy	CXB7523				
48	Screw	BMZ20P025FTC				
49	Washer	CBF1064				
50	Holder	CND1668				

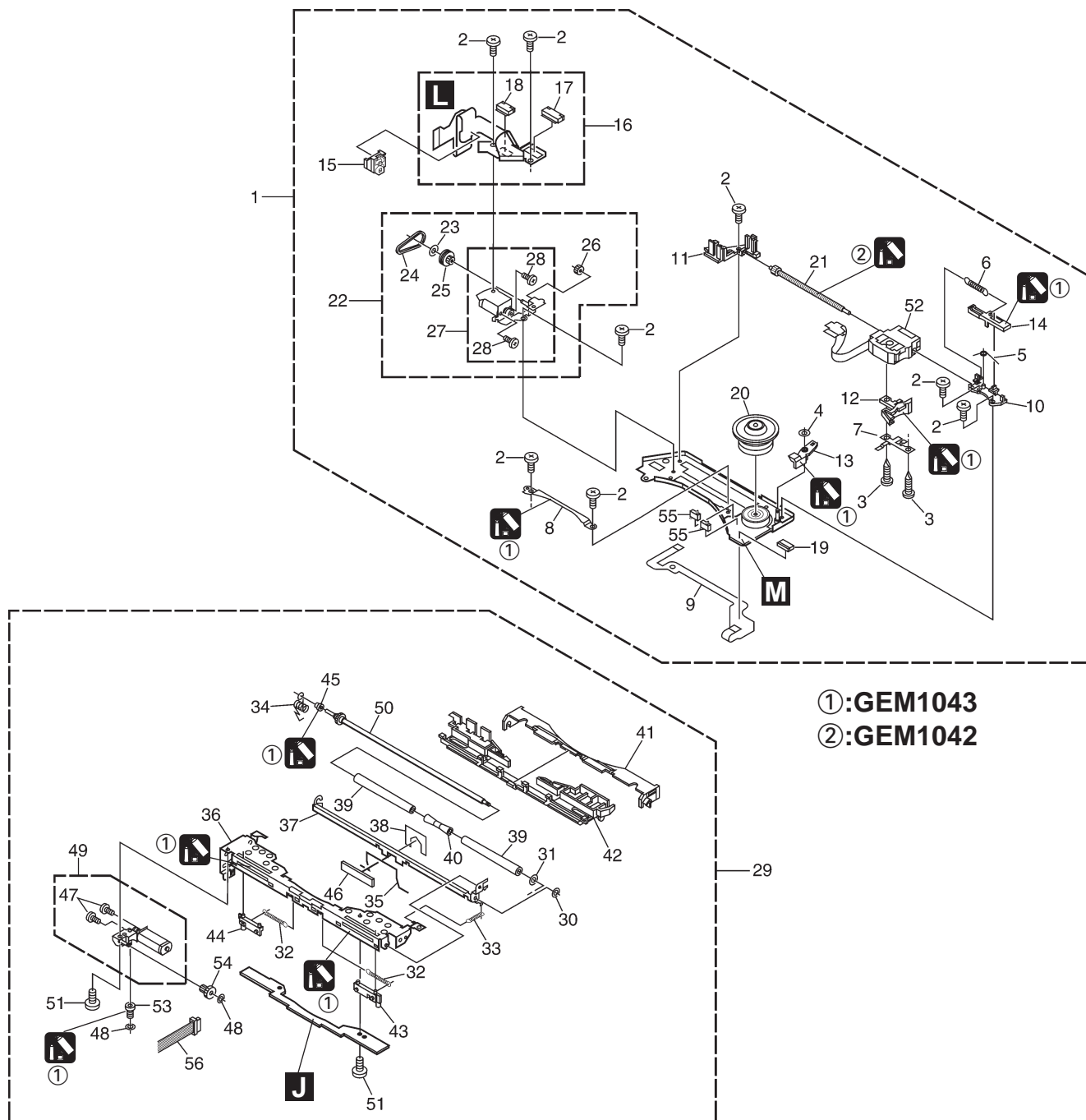
## 2.7 SERVICE MECHANISM UNIT(G2AVX)(2)

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# SERVICE MECHANISM UNIT(G2AVX)(2) SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	Carriage Mech. Assy(G2)	CXB7520				
2	Screw(M2x2)	CBA1556	51	Screw	JFZ20P020FTC	
3	Screw(M2x6)	CBA1628	52	PU Unit(PX1)(Service)	CXX1568	
4	Washer	CBF1038	* 53	Gear	CNV6620	A
5	Spring	CBH2453	* 54	Gear	CNV6621	
			55	Switch(S1,2)	CSN1057	
6	Spring	CBH2480				
7	Spring	CBL1521	* 56	Connector	CDE6674	
* 8	Guide	CNC9402				
9	Flexible PCB	CNP6217				
10	Holder	CNV6624				
11	Holder	CNV6625				
12	Rack	CNV6642				
13	Arm	CNV6731				
14	Lever	CNV6736				
15	Holder	CNV6737				
16	PCB Unit	CWX2611				
17	Connector(CN41)	CKS3785				
18	Connector(CN42)	CKS4508				B
19	Connector(CN1)	CKS4508				
20	Support Wheel Unit	CXC1657				
21	Screw Unit(-A)	CXB7518				
22	Carriage Motor Assy	CXB7521				
23	Washer	CBF1038				
24	Belt	CNT1088				
25	Pulley	CNV6627				
26	Gear	CNV6629				
27	Motor Unit(-A)(M3)	CXC1143				
28	Screw	JFZ14P020FTC				
29	Loading Mech. Assy	CXB7525				
30	Washer	CBF1037				
* 31	Washer	CBF1075				C
* 32	Spring	CBH2450				
33	Spring	CBH2672				
* 34	Spring	CBH2457				
* 35	Spring	CBH2580				
* 36	Frame	CND1653				
* 37	Arm	CND1654				
* 38	Sheet	CNM7295				
39	Roller	CNV6616				
40	Collar	CNV6617				
* 41	Guide	CNV6622				
* 42	Holder	CNV6636				
* 43	Lever	CNV6732				
* 44	Lever	CNV6733				
45	Collar	CNV6734				D
* 46	Holder	CNV7144				
47	Screw	JFZ12P018FTC				
48	Washer	CBF1037				
* 49	Motor Unit(-C)	CXC1146				
50	Shaft Unit(-B)	CXB7528				







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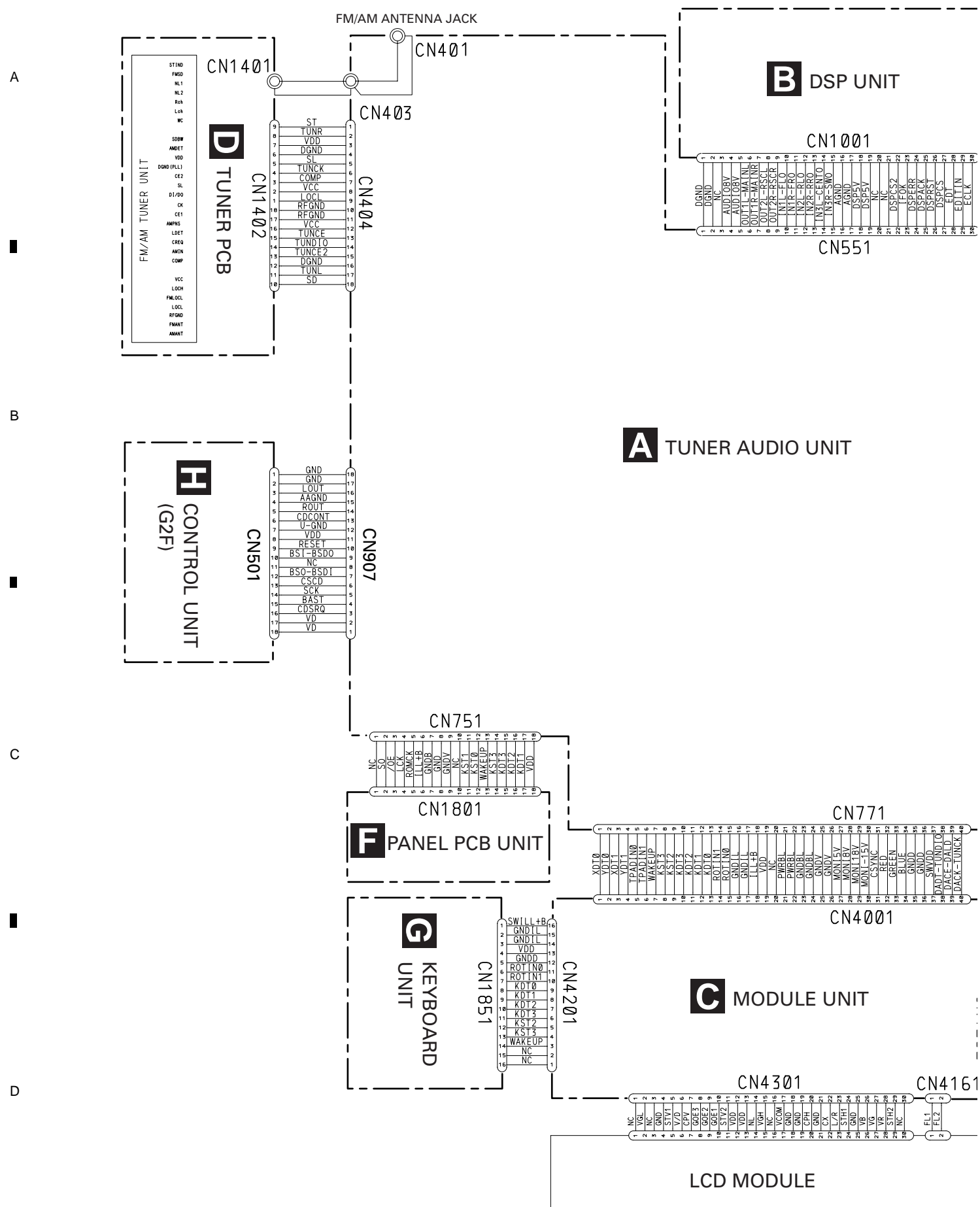
7

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### 3.3 OVERALL CONNECTION DIAGRAM





### 3.4 TUNER AUDIO UNIT(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

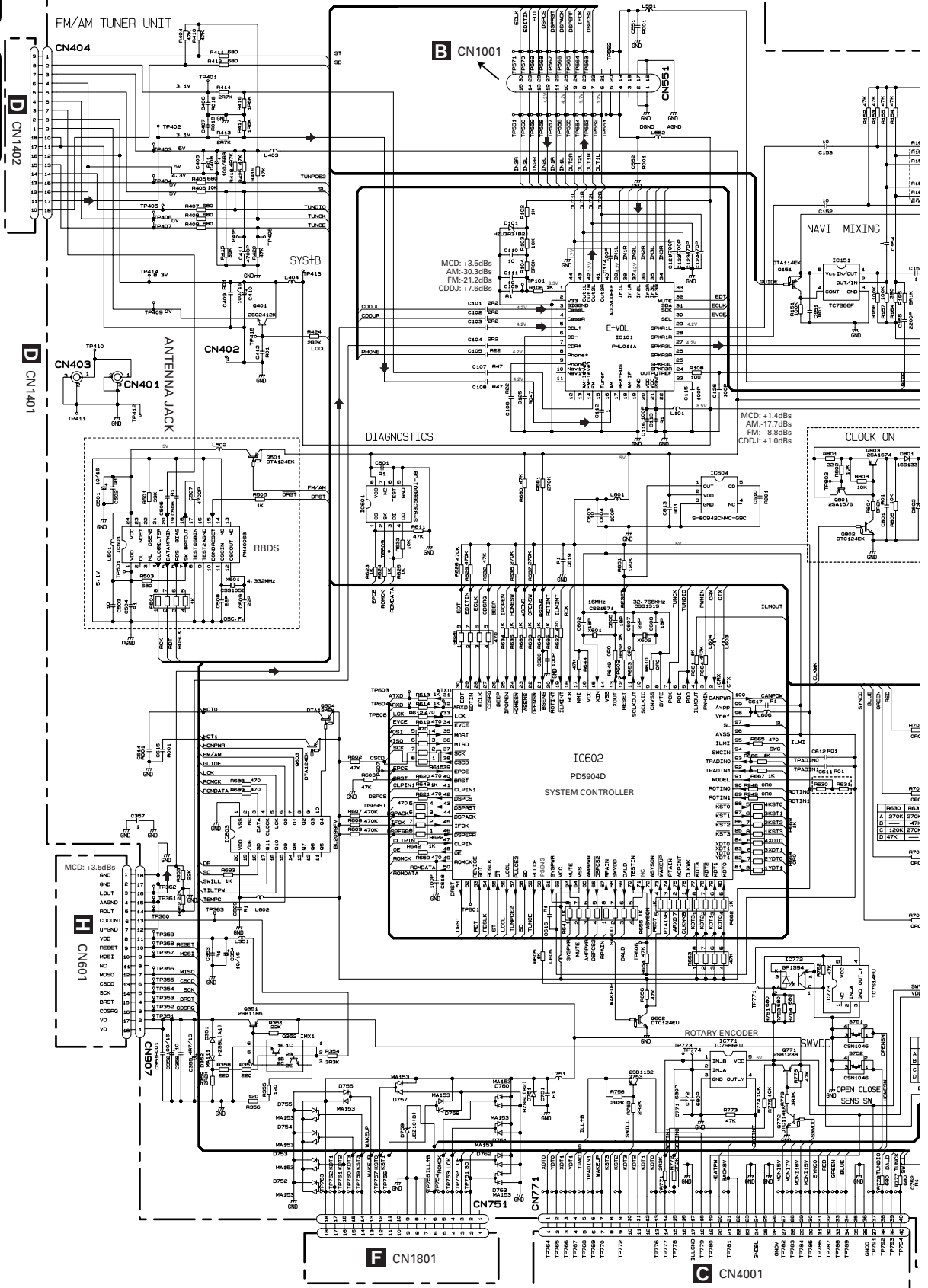
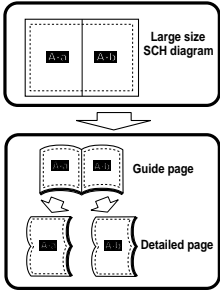
A

A-a

B

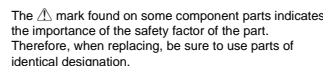
C

D



**A** TUNER AUDIO UNIT

**A** TUNER AUDIO UNIT



27

A-b

A

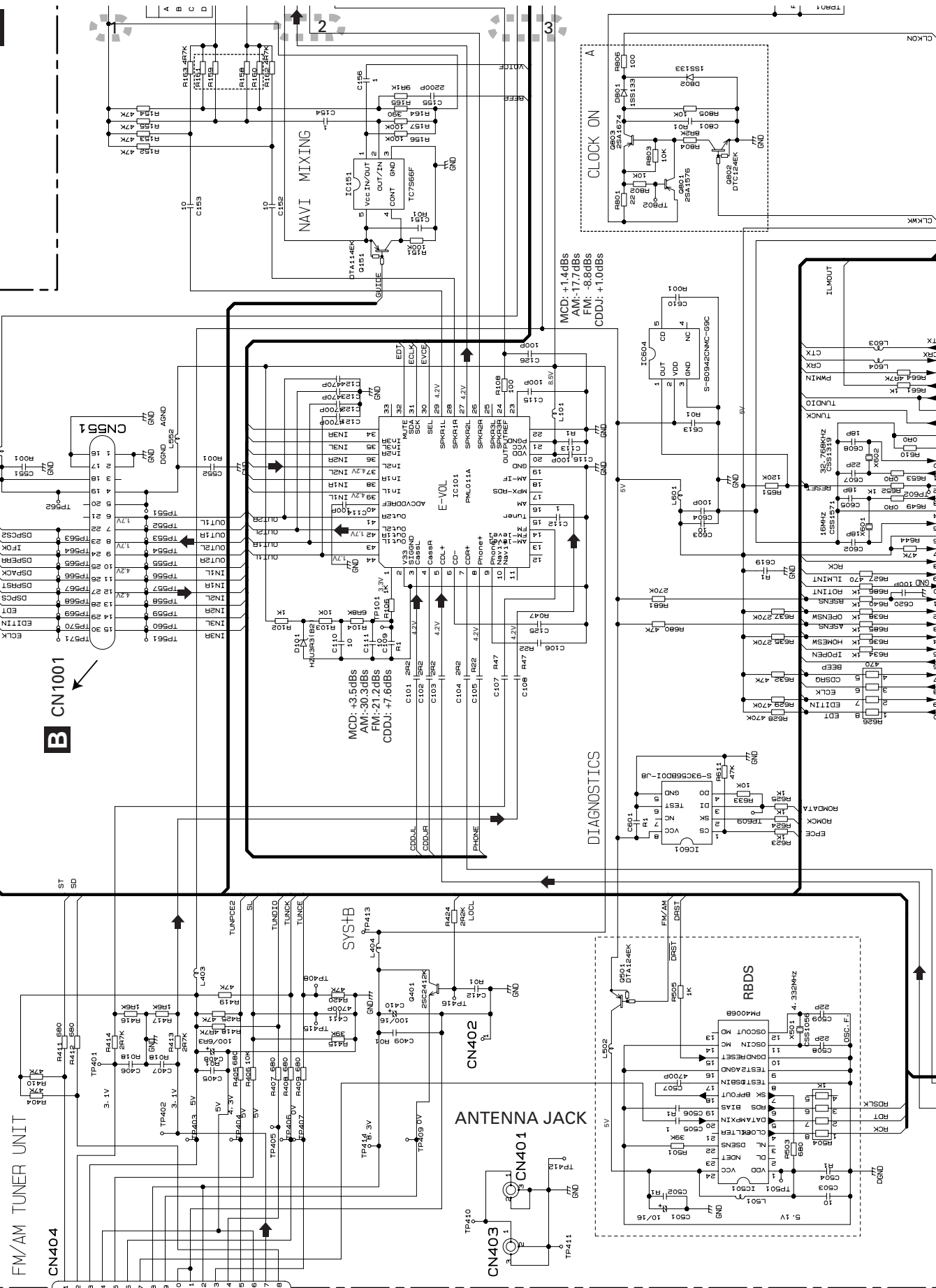
B

C

D

A-a

A-b



B CN1001

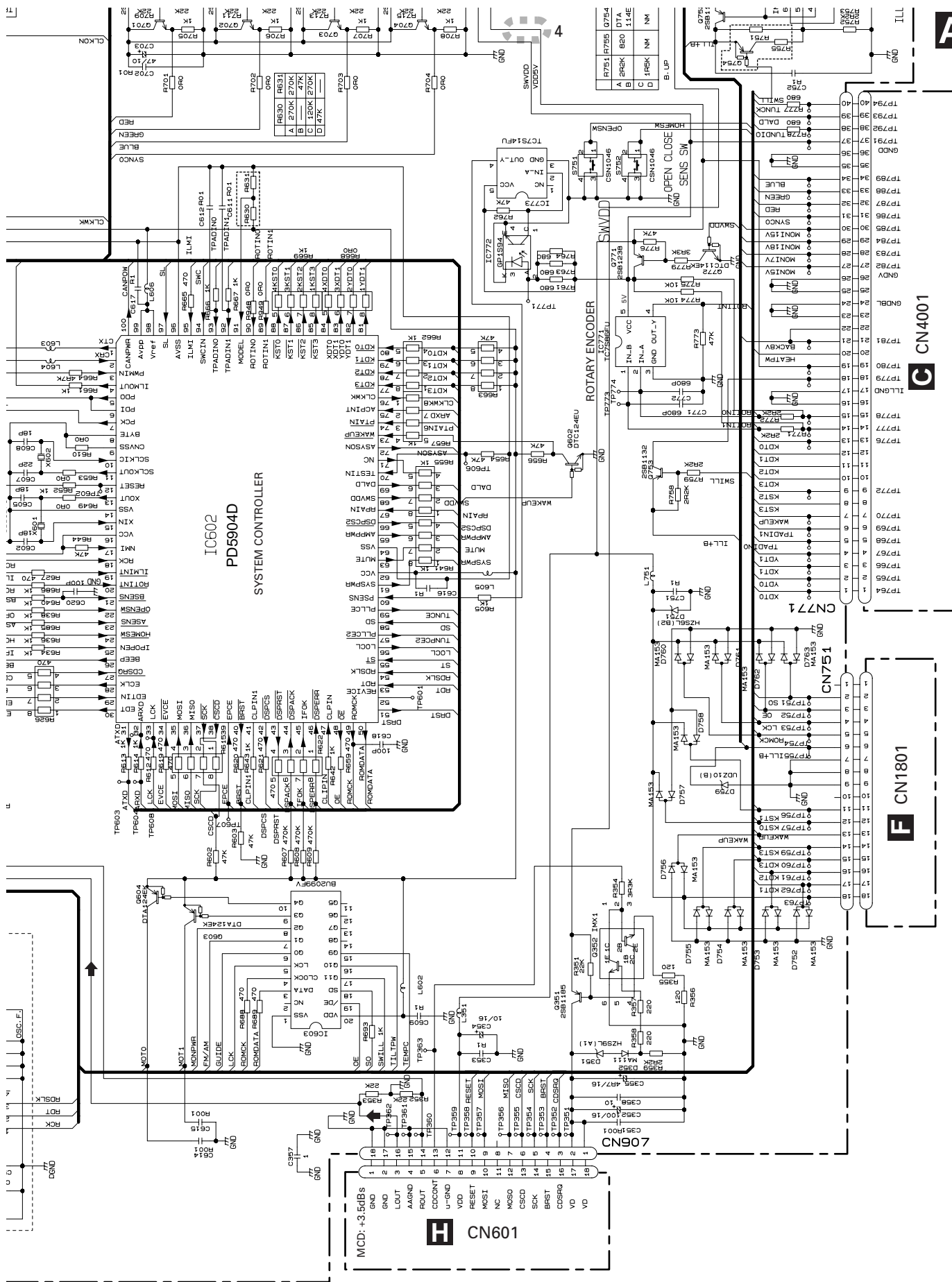
ANTENNA JACK

D CN1401

D CN1402

A-a





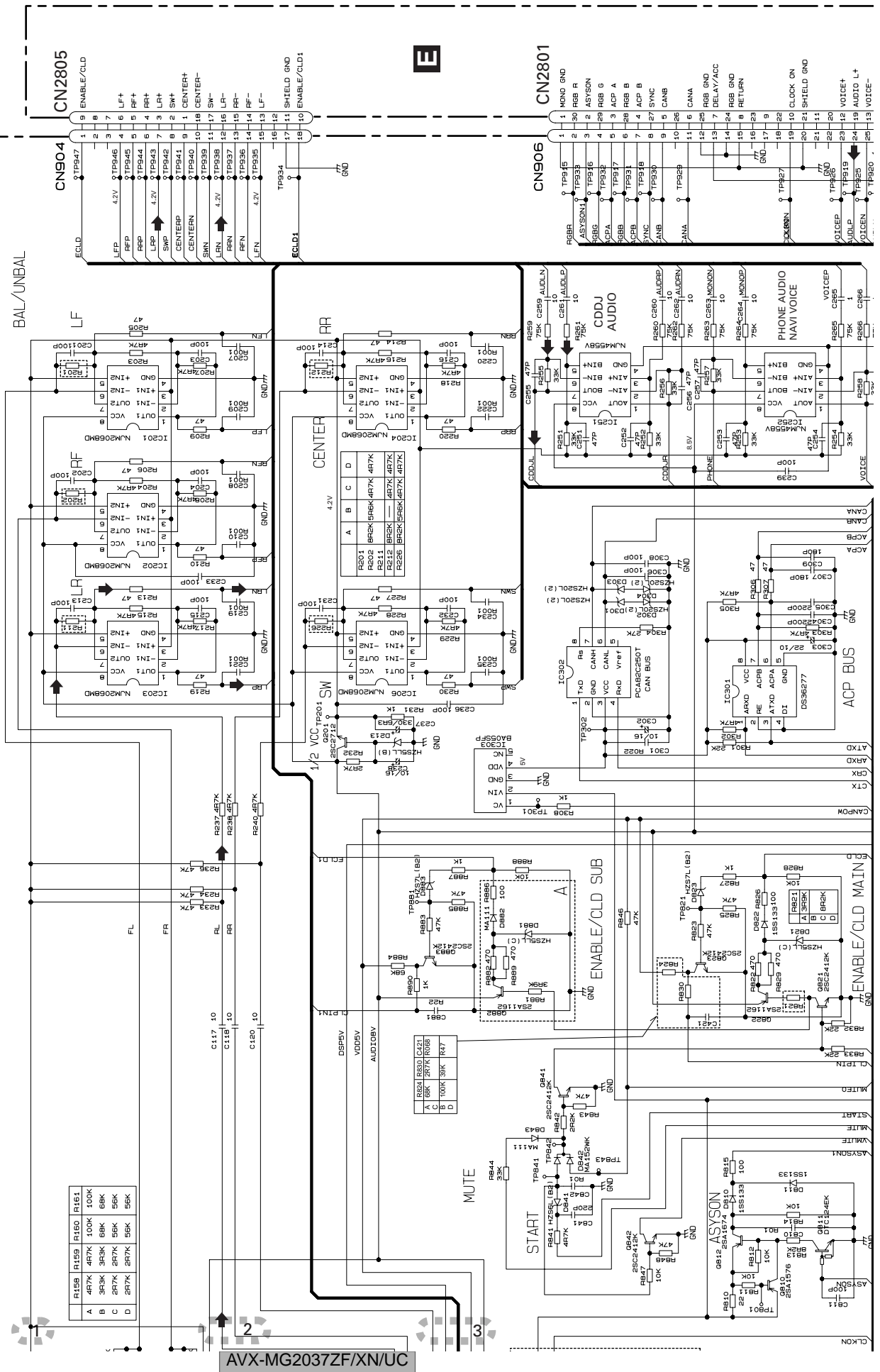
A-b

C CN4001

F CN1801

H CN601

# A-b







Decimal points for resistor and capacitor fixed values are expressed as :

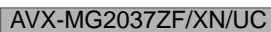
$2.2 \rightarrow 2R2$   
 $0.022 \rightarrow R022$

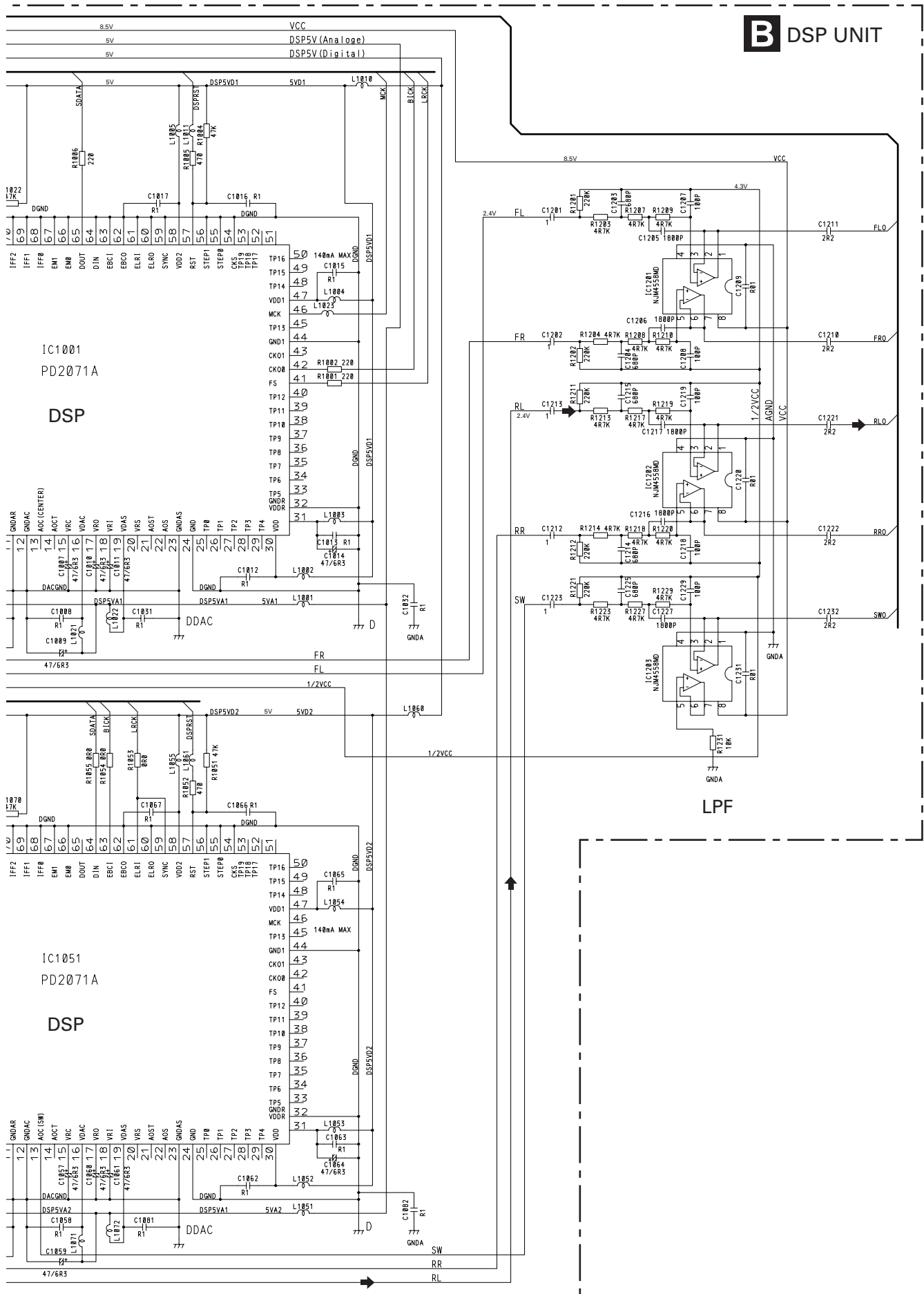
NOTE :

-  Symbol indicates a resistor.  
No differentiation is made between chip resistors and discrete resistors.
-  Symbol indicates a capacitor.  
No differentiation is made between chip capacitors and discrete capacitors.

The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

△

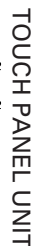




## 4



## D





## ● Waveforms

Note : The encircled numbers denote measuring pointes in the circuit diagram.

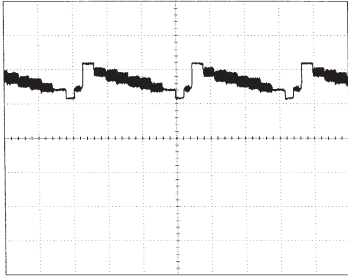
① CH1:TP CSYNC 2V/div. 20 $\mu$ s/div.

② CH1:TP GIN 500mV/div. 20 $\mu$ s/div.

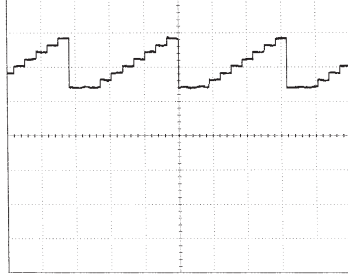
③ CH1:TP GOUT 500mV/div. 1ms/div.

A

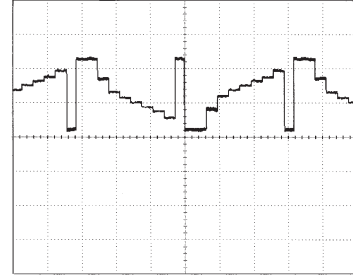
Composite Color Bar Signal  
TV, VTR input



RIN and BIN are the same as GIN.  
RGB 7 Step Signal  
Navigation input



RIN and BIN are the same as GIN.  
RGB 7 Step Signal

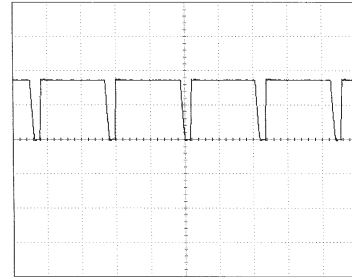
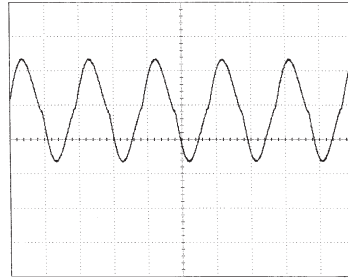
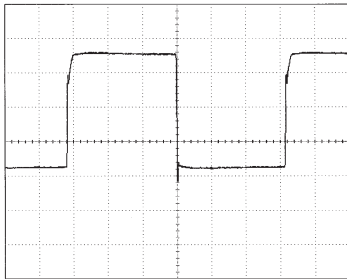


④ CH1:TP VCOM 2V/div. 20 $\mu$ s/div.

⑧ CH1:TP4162 10V/div. 10 $\mu$ s/div.

⑨ CH1:TP4161 5V/div. 5ms/div.

B



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3.7 TUNER PCB

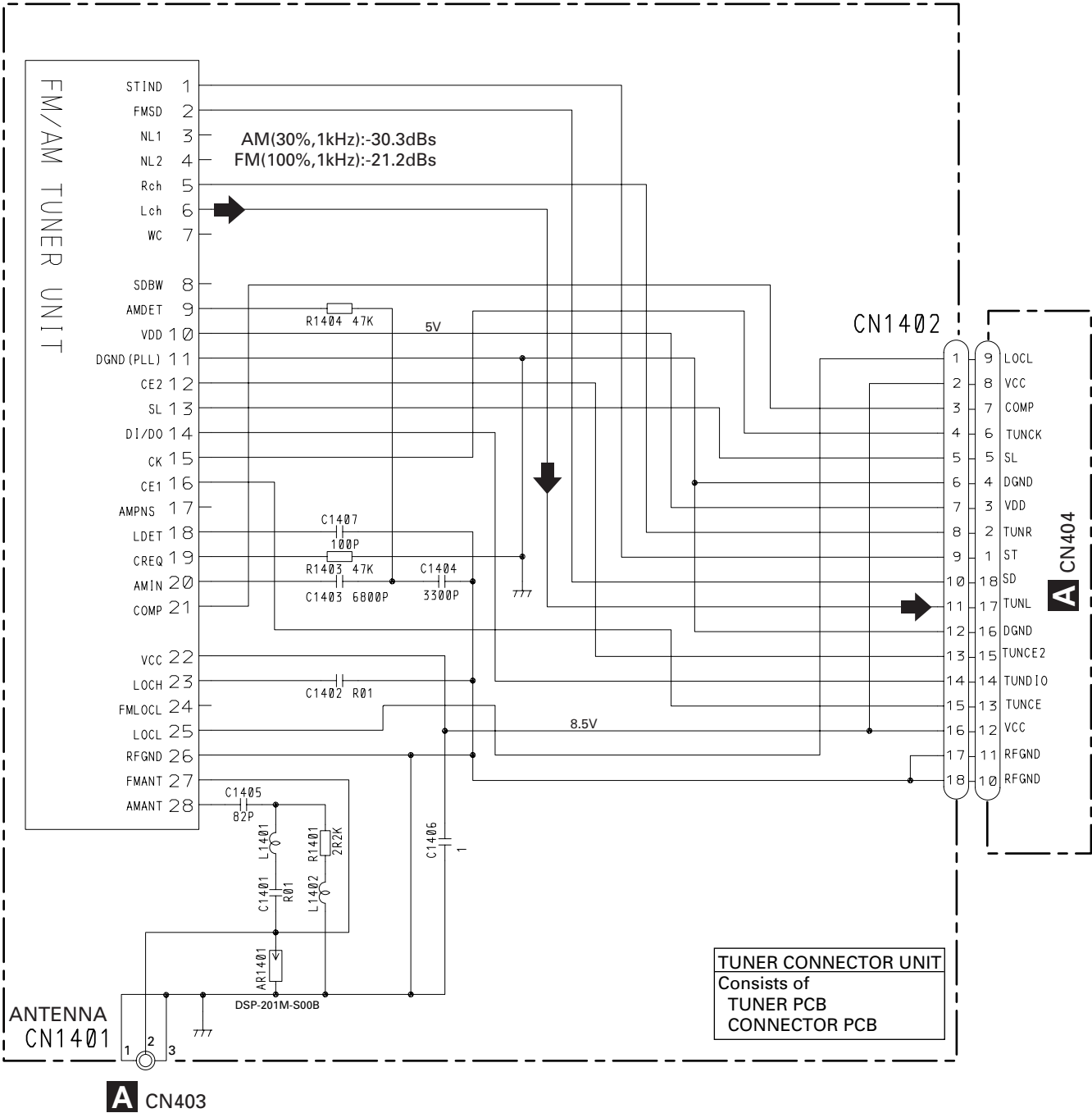
A

D TUNER PCB

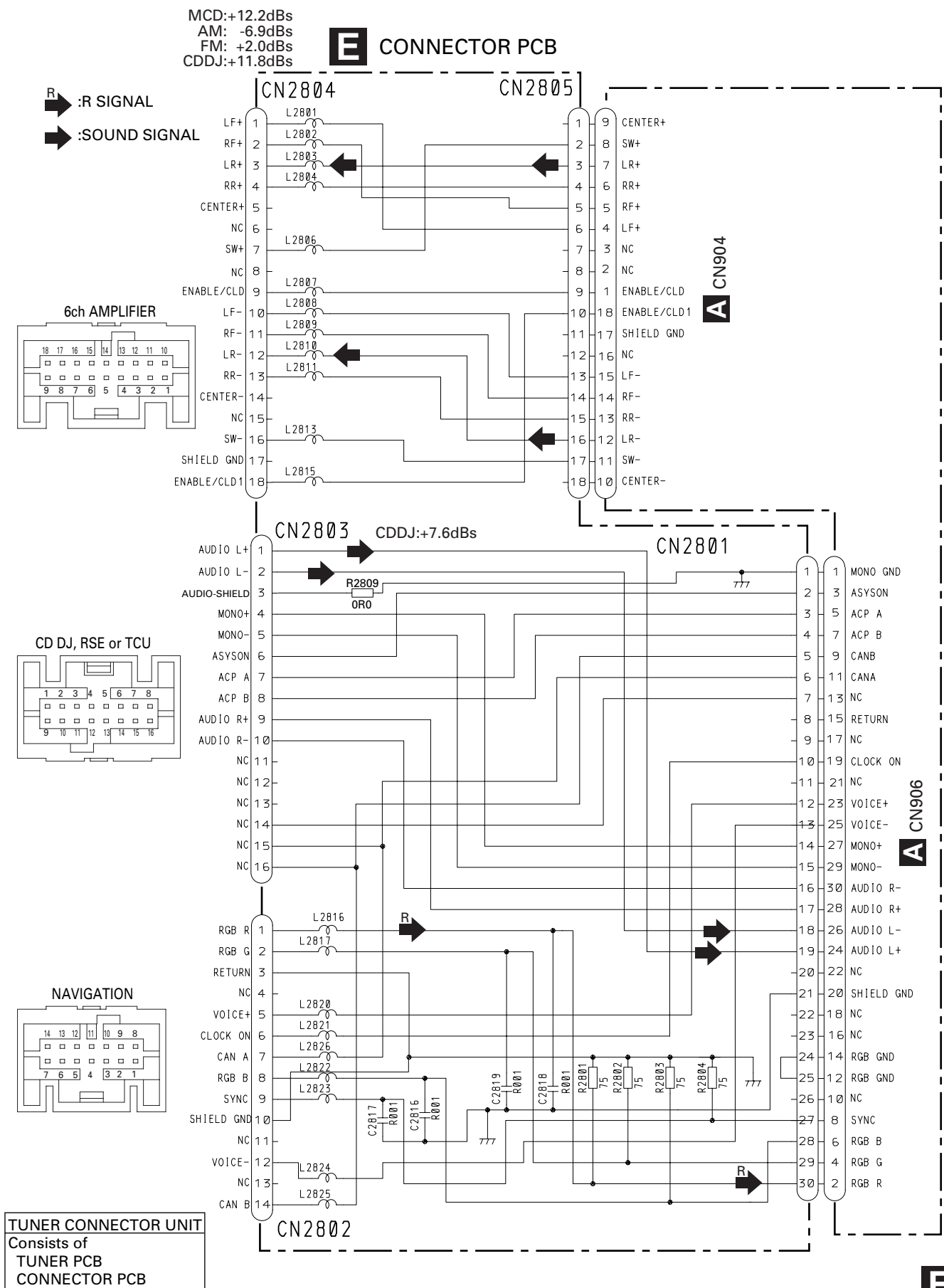
B

C

D



### 3.8 CONNECTOR PCB



### 3.9 PANEL PCB UNIT

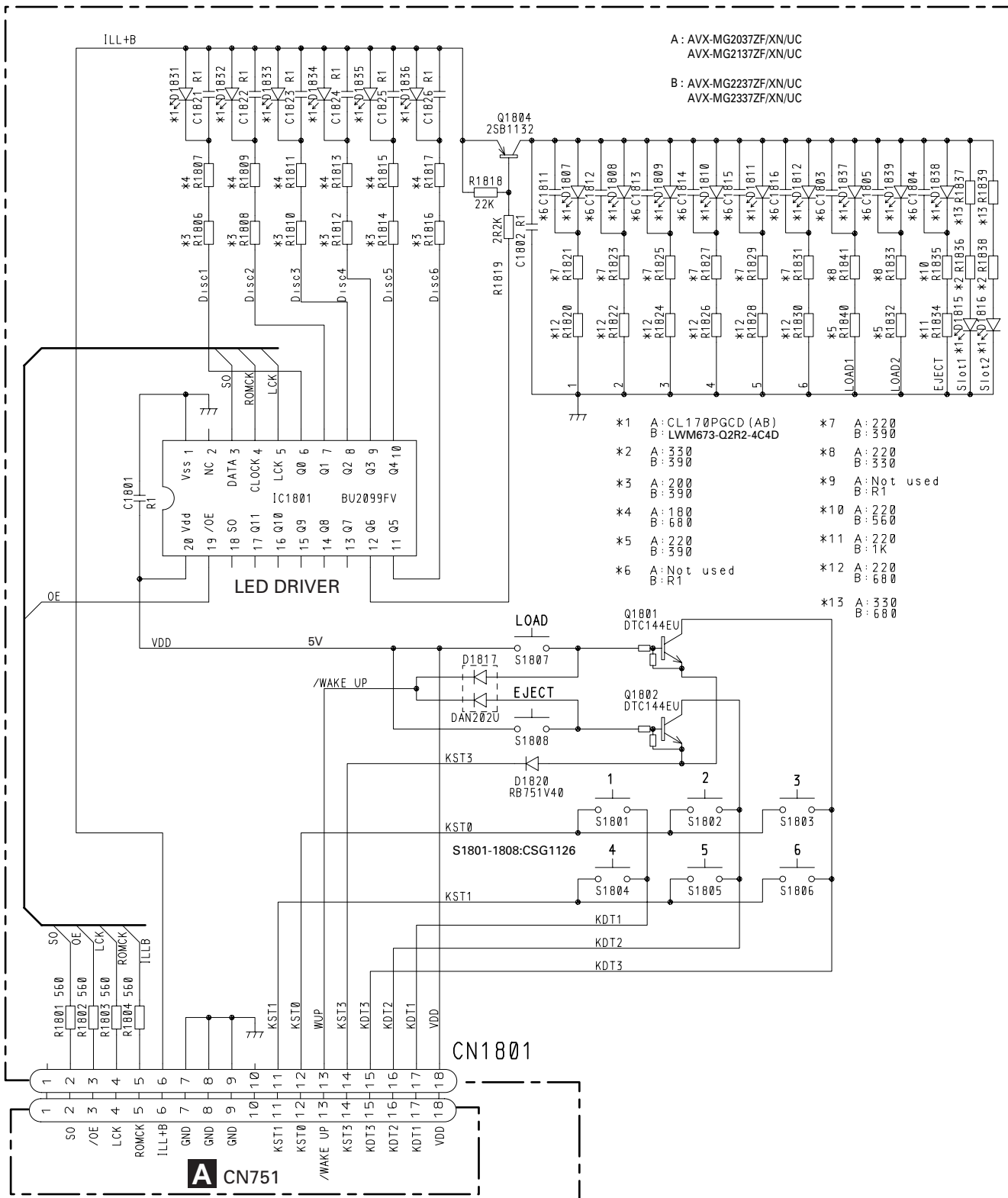
A

**F** PANEL PCB UNIT

B

C

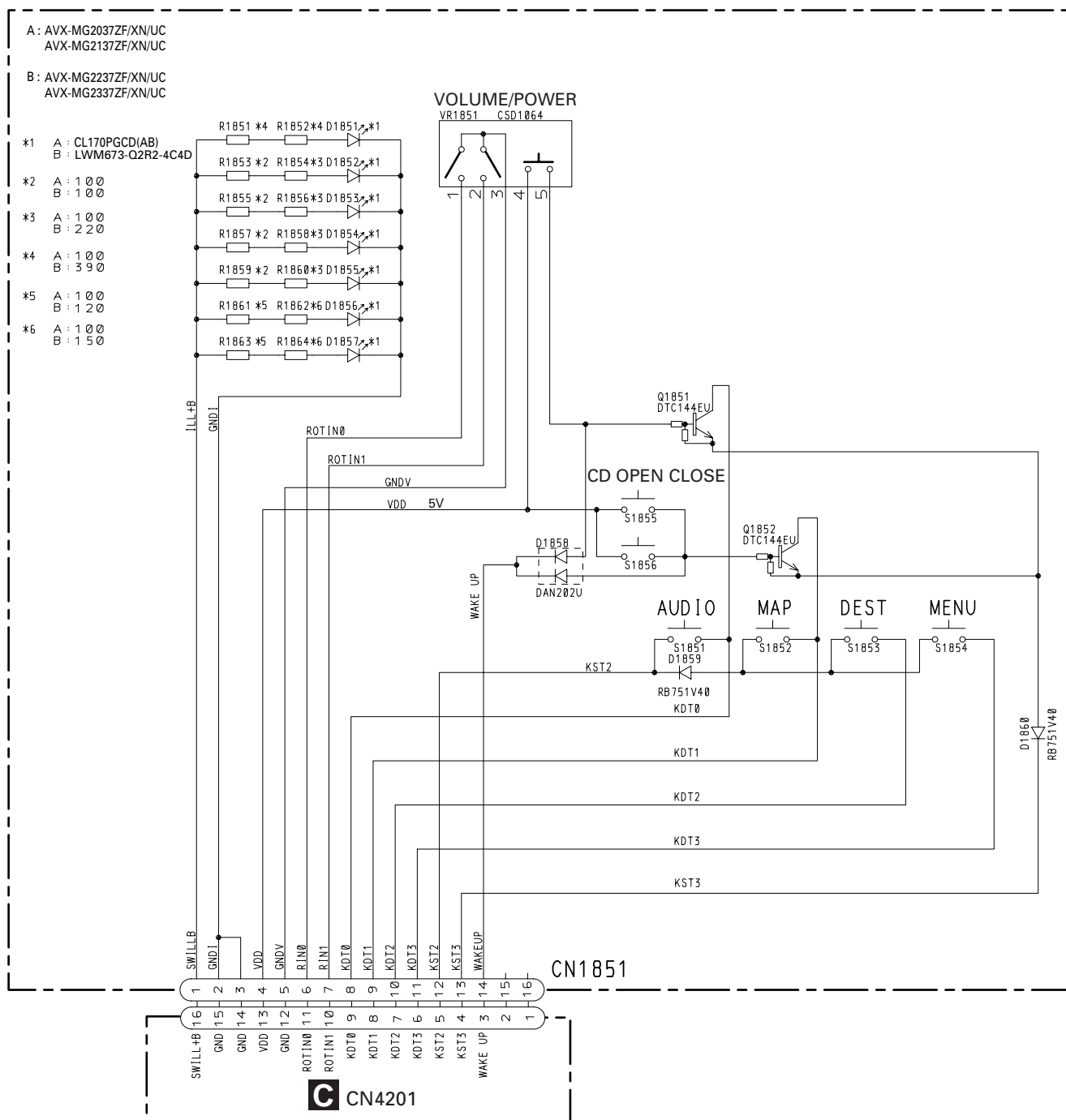
D



**F**

## 3.10 KEYBOARD UNIT

### G KEYBOARD UNIT



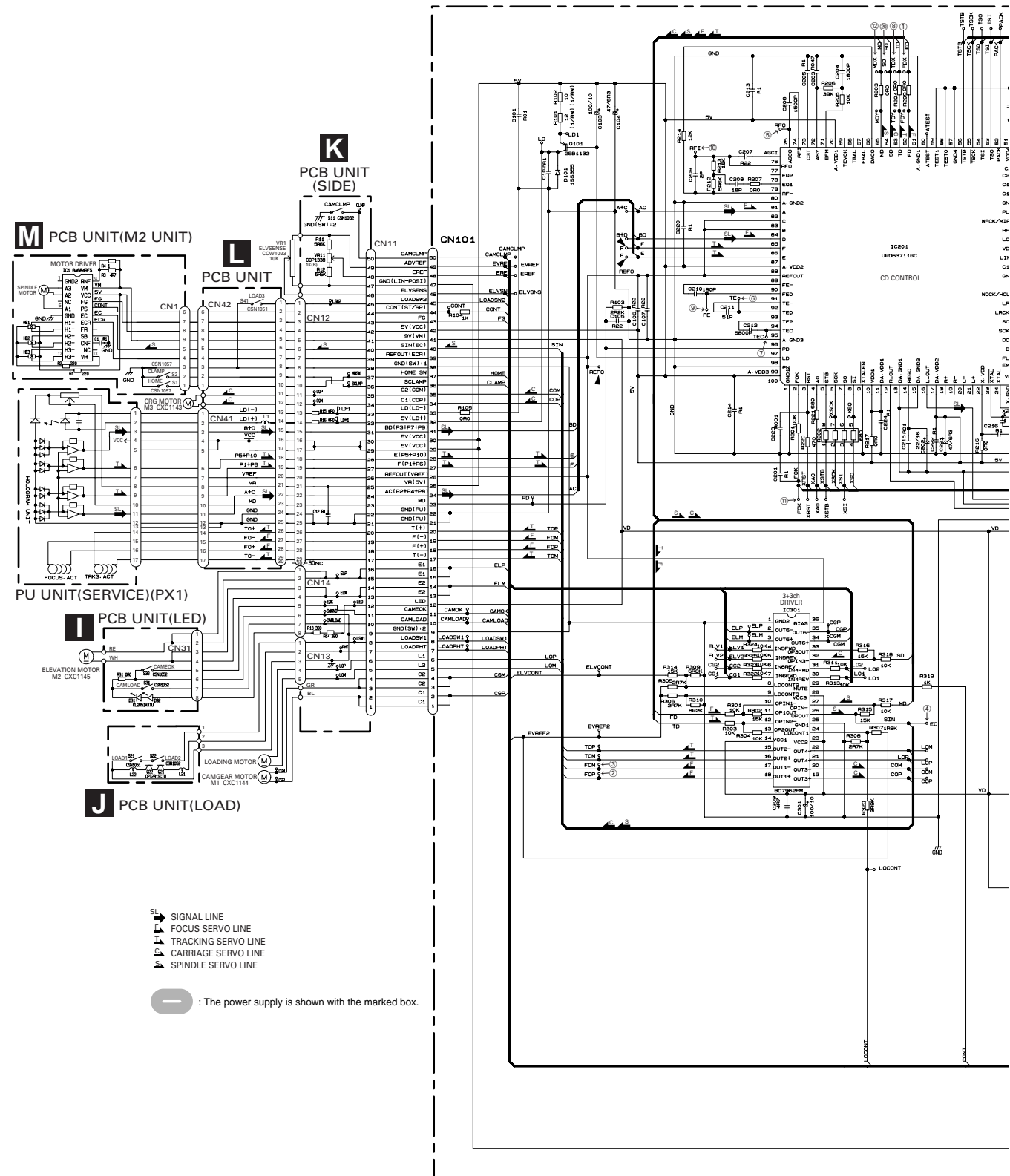
# 3.11 CD MECHANISM MODULE(G2F)(GUIDE PAGE)

A

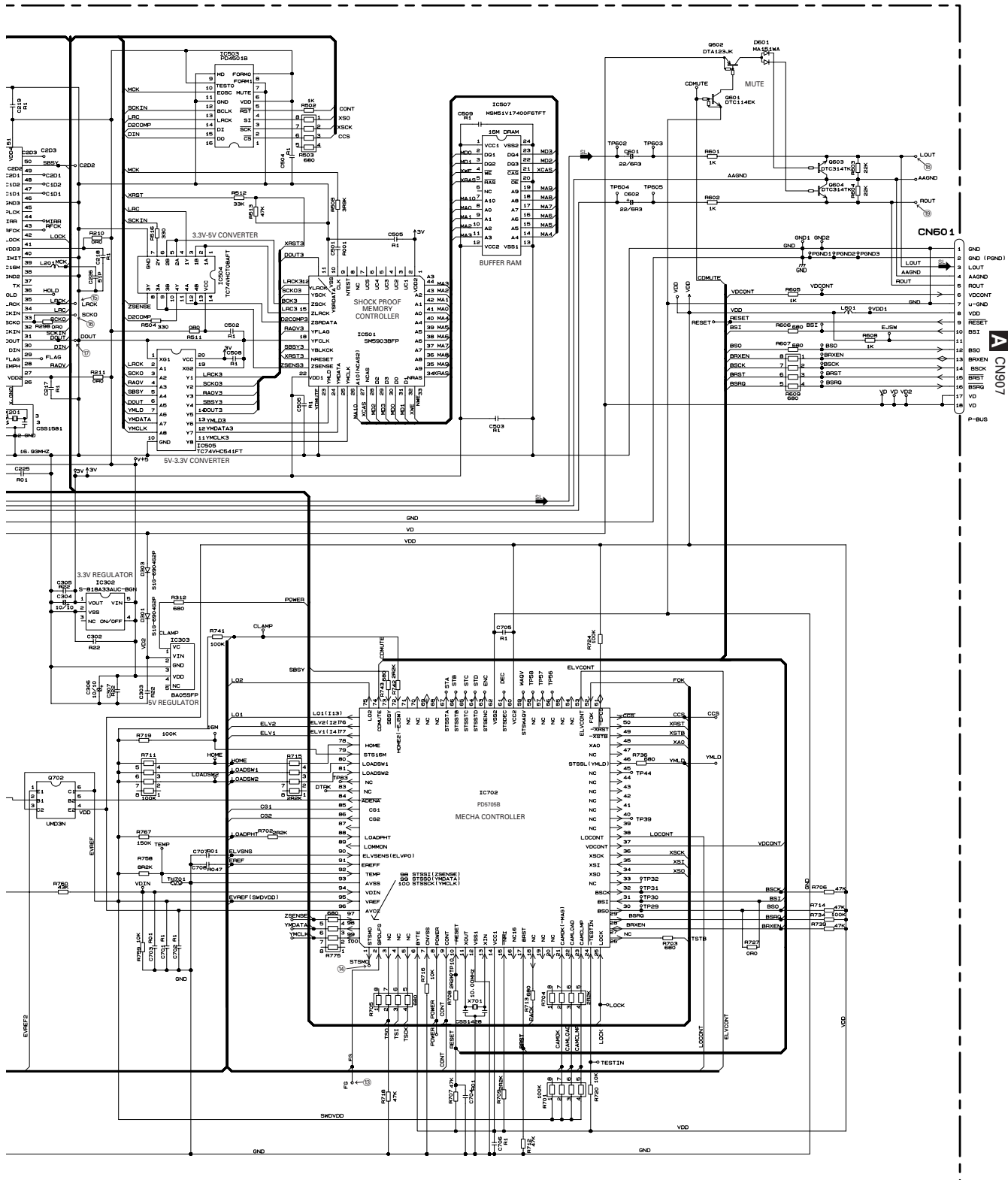
B

C

D



**H** CONTROL UNIT(G2F)



A

B

C

D

A

B

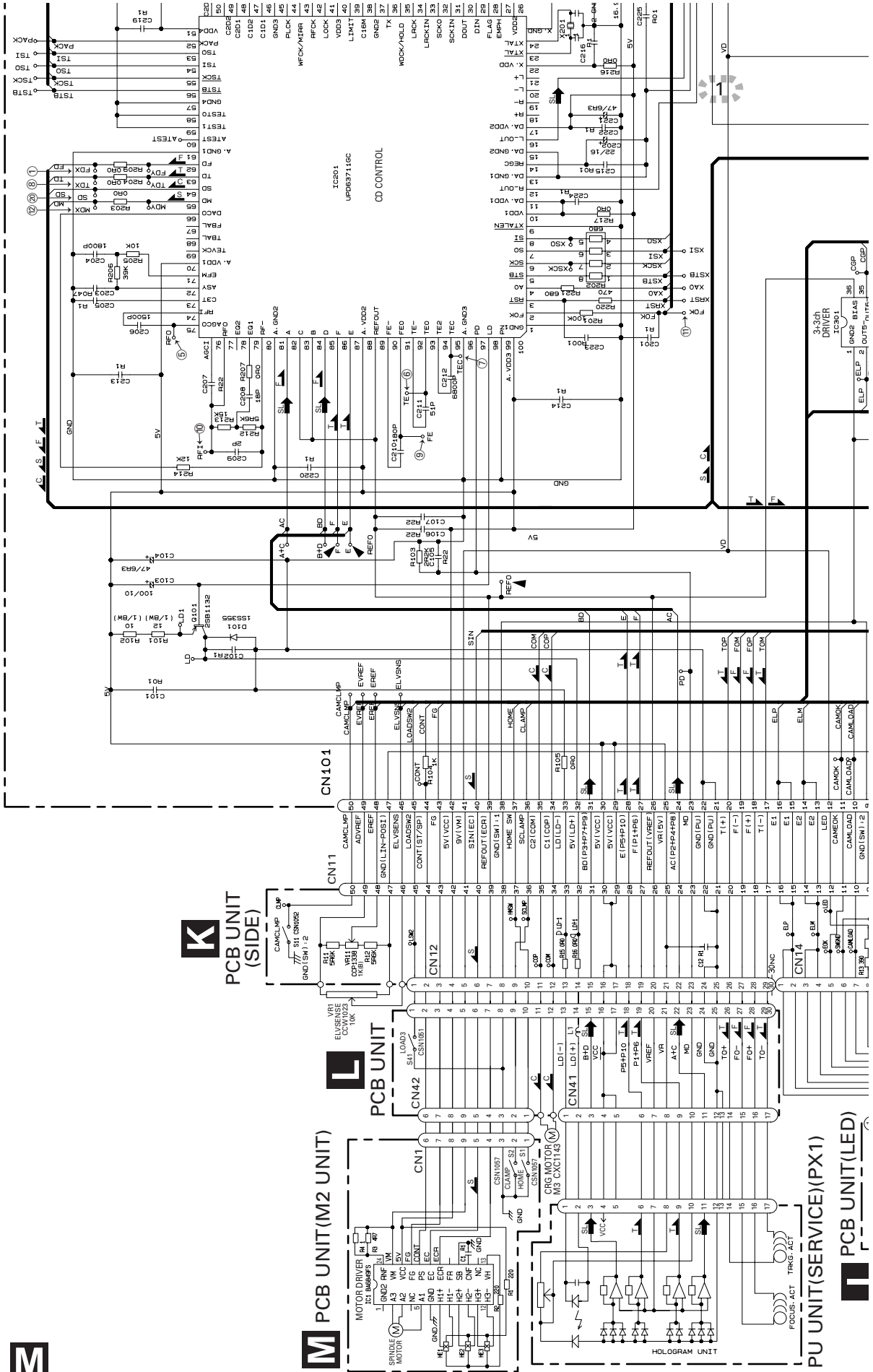
C

D

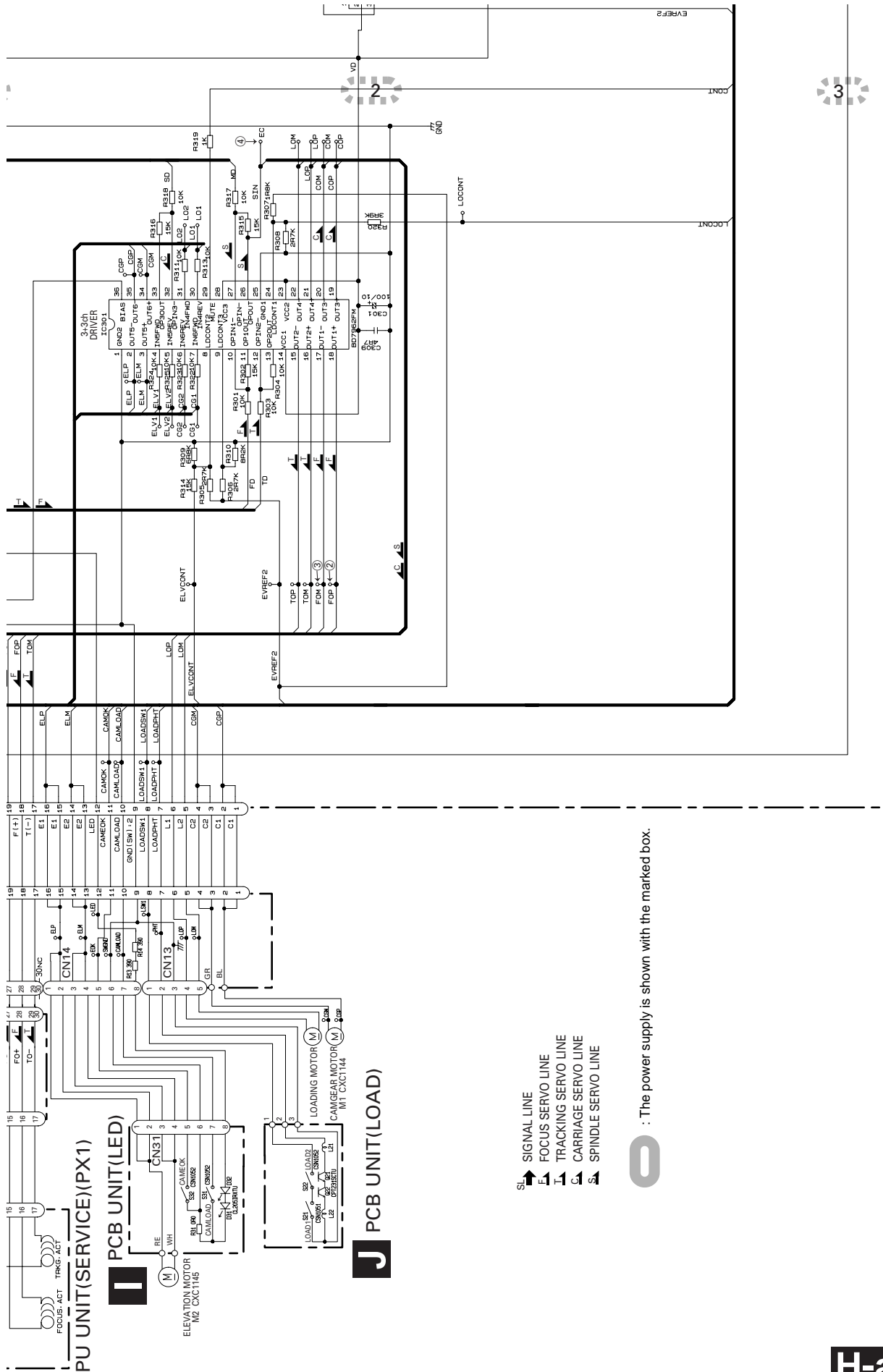
H-b

H-a H-b

H-a K L M







H-b

A

B

C

D

H-a H-b

H-a I J K



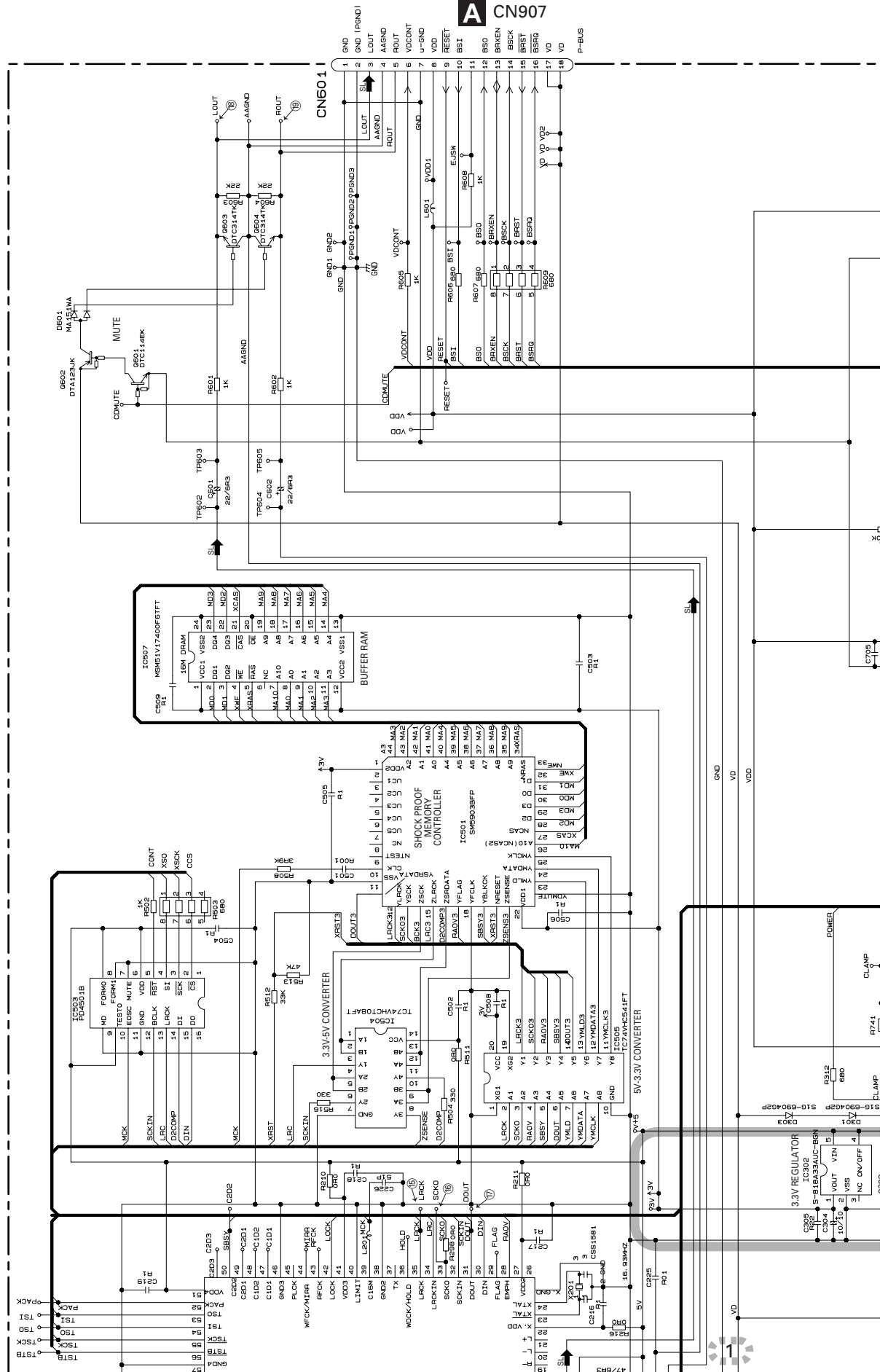
**A**

H-a	H-b
	

**H-b**

46

AVX-MG2037ZF/XN/UC

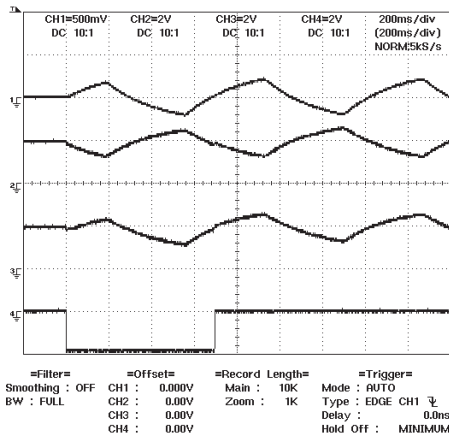




# Waveforms

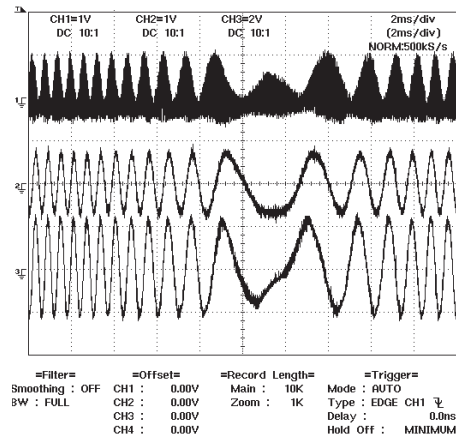
Note: The encircled numbers denote measuring points in the circuit diagram.

CH1 : ① FDX Mode:Test  
CH2 : ② FOP  
CH3 : ③ FOM  
CH4 : ④ EC  
Focus search mode



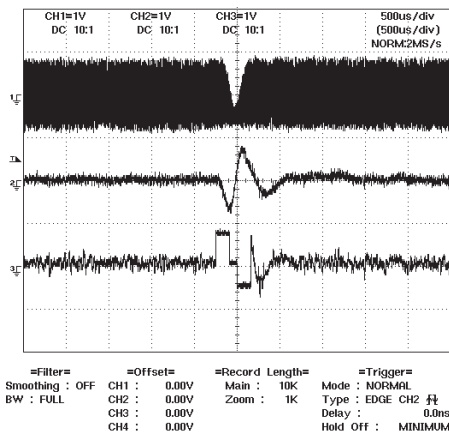
CH1 : ⑤ RFO Mode:Test  
CH2 : ⑥ TE  
CH3 : ⑦ TEC

Tracking open



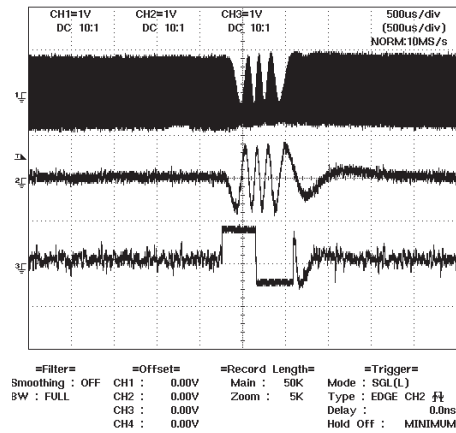
CH1 : ⑤ RFO Mode:Test  
CH2 : ⑥ TE  
CH3 : ⑧ TDX

1 Track Jump



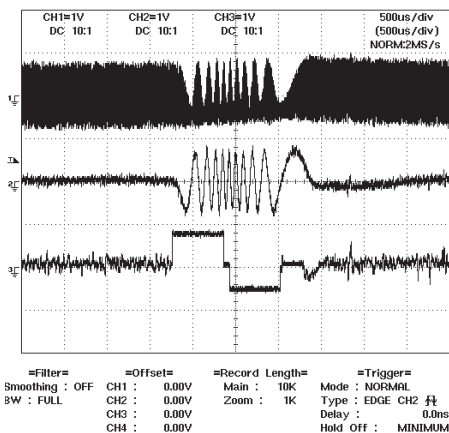
CH1 : ⑤ RFO Mode:Test  
CH2 : ⑥ TE  
CH3 : ⑧ TDX

4 Track Jump



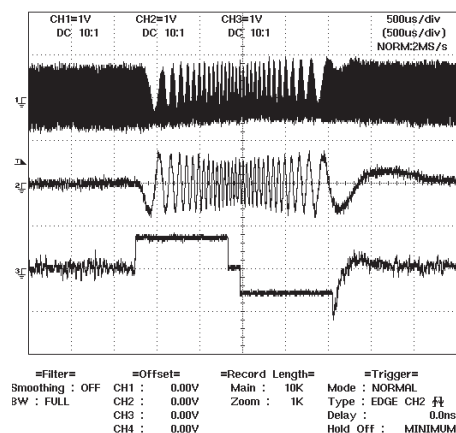
CH1 : ⑤ RFO Mode:Test  
CH2 : ⑥ TE  
CH3 : ⑧ TDX

10 Track Jump



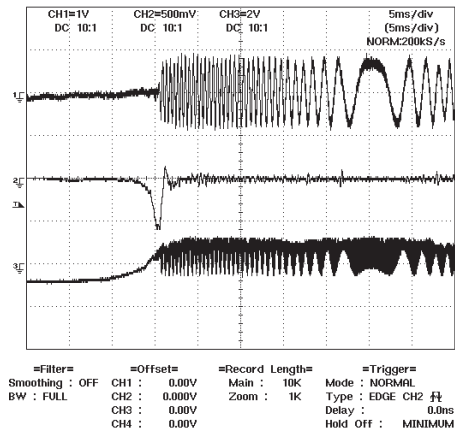
CH1 : ⑤ RFO Mode:Test  
CH2 : ⑥ TE  
CH3 : ⑧ TDX

32 Track Jump

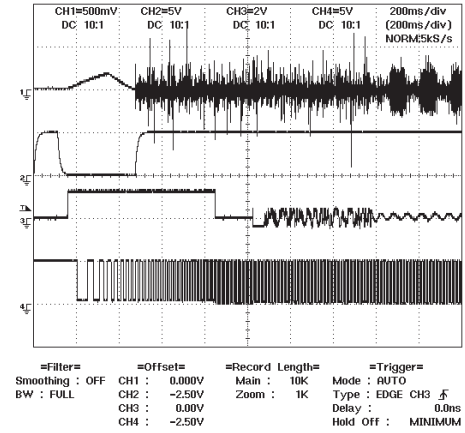


CH1: ⑥ TE Mode:Normal  
 CH2: ⑨ FE  
 CH3: ⑩ RFI

Focus close

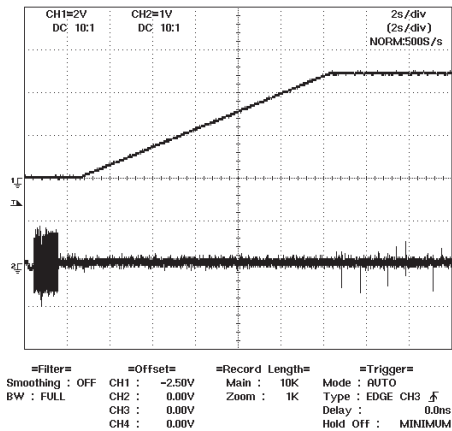


CH1: ① FDX Mode:Normal  
 CH2: ⑪ FOK  
 CH3: ⑫ MDX  
 CH4: ⑬ FG  
 Setup

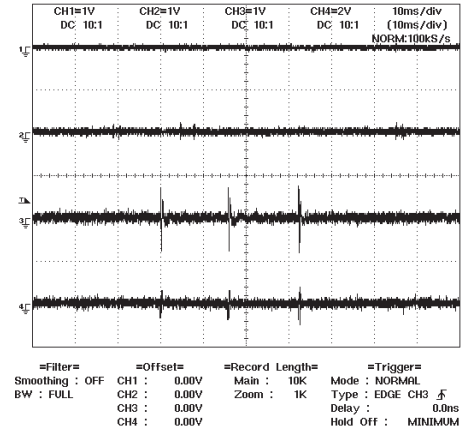


CH1: ⑭ STSMO Mode:Normal  
 CH2: ⑥ TE

Memory capacity (remaining) at the starting of PLAY

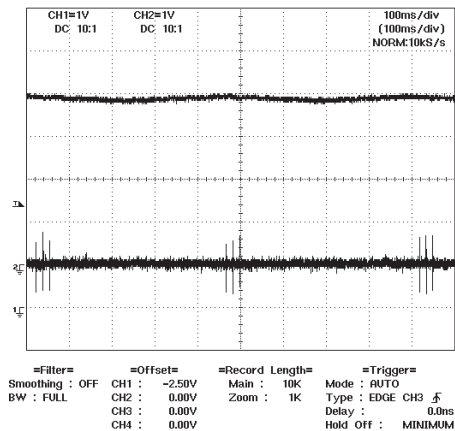


CH1: ⑨ FE Mode:Normal  
 CH2: ① FDX  
 CH3: ⑥ TE  
 CH4: ⑧ TDX  
 During "Play"



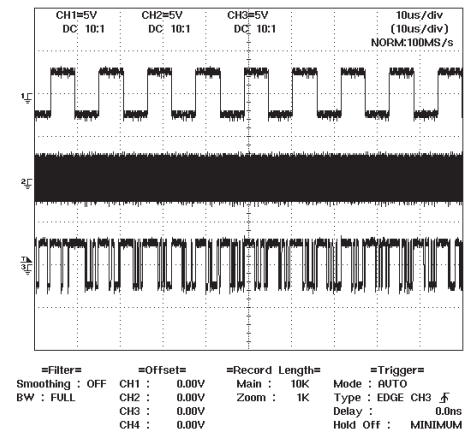
CH1: ⑭ RFO Mode:Normal  
 CH2: ⑥ TE

Memory capacity (remaining) during PLAY



CH1: ⑮ LRCK Mode:Normal  
 CH2: ⑮ SCKO  
 CH3: ⑮ DOUT

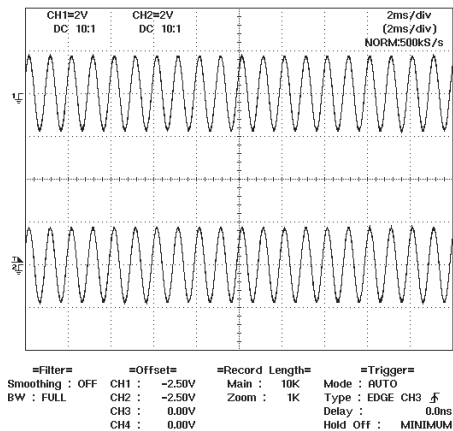
Digital audio data(x2 speed)



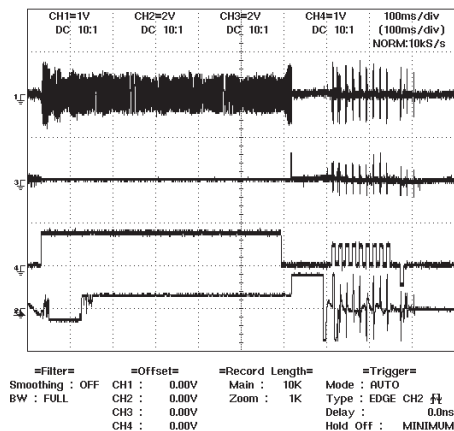
CH1 : ⑮ LOUT Mode:Normal  
CH2 : ⑰ ROUT

A

Audio output(1kHz , 0dB)

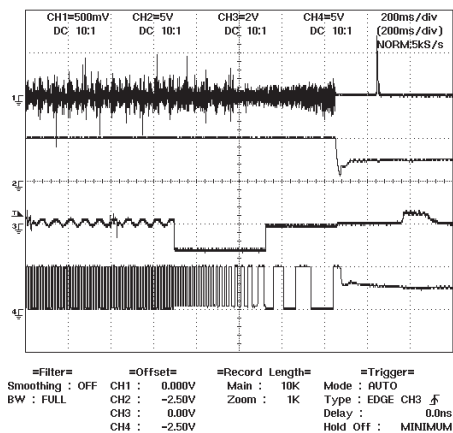


CH1 : ⑥ TE Mode:Normal  
CH2 : ⑧ TDX  
CH3 : ⑳ SD  
CH4 : ④ EC  
During inside / outside search



B

CH1 : ① FDX Mode:Normal  
CH2 : ⑪ FOK  
CH3 : ⑫ MDX  
CH4 : ⑬ FG  
DISC stop



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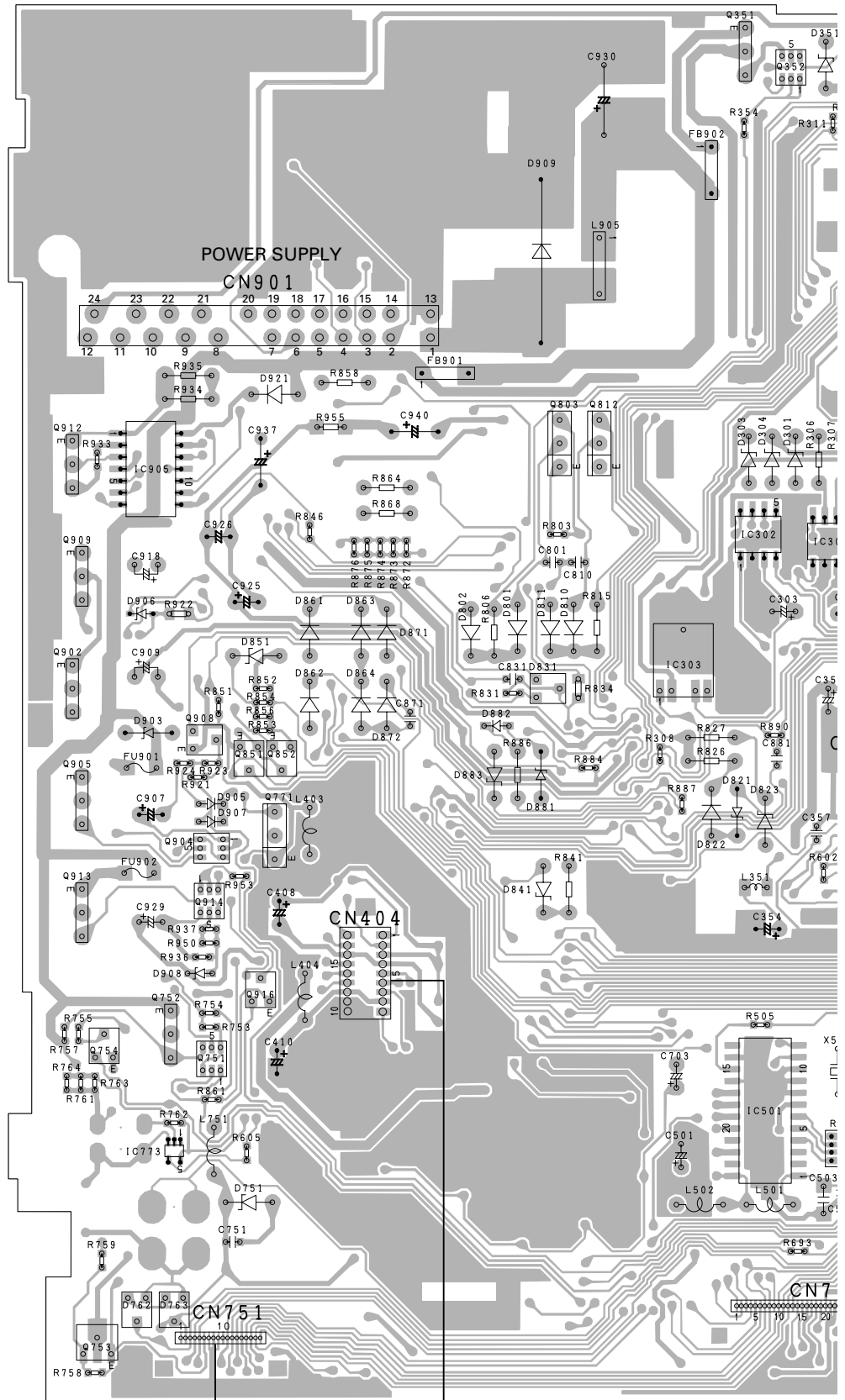
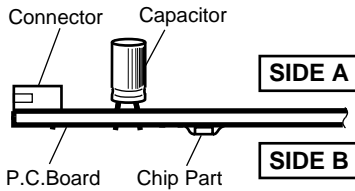
■

## 4.1 TUNER AUDIO UNIT

**A**

1. The parts mounted on this PCB include all necessary parts for several destination. For further information for respective destinations, be sure to check with the schematic diagram.

The diagram shows a top-down view of a PCB layout. A horizontal signal trace is labeled 'Signal' on both the top and bottom. On the left, a 'Connector' is connected to the trace. In the center, a 'Capacitor' is connected to the trace. On the right, a 'Chip Part' is connected to the trace. The PCB is labeled 'PCB Board' on the left and 'PCB Board' on the right. The labels 'Signal' and 'Signal' are in boxes on the right side of the trace.



D CN1402

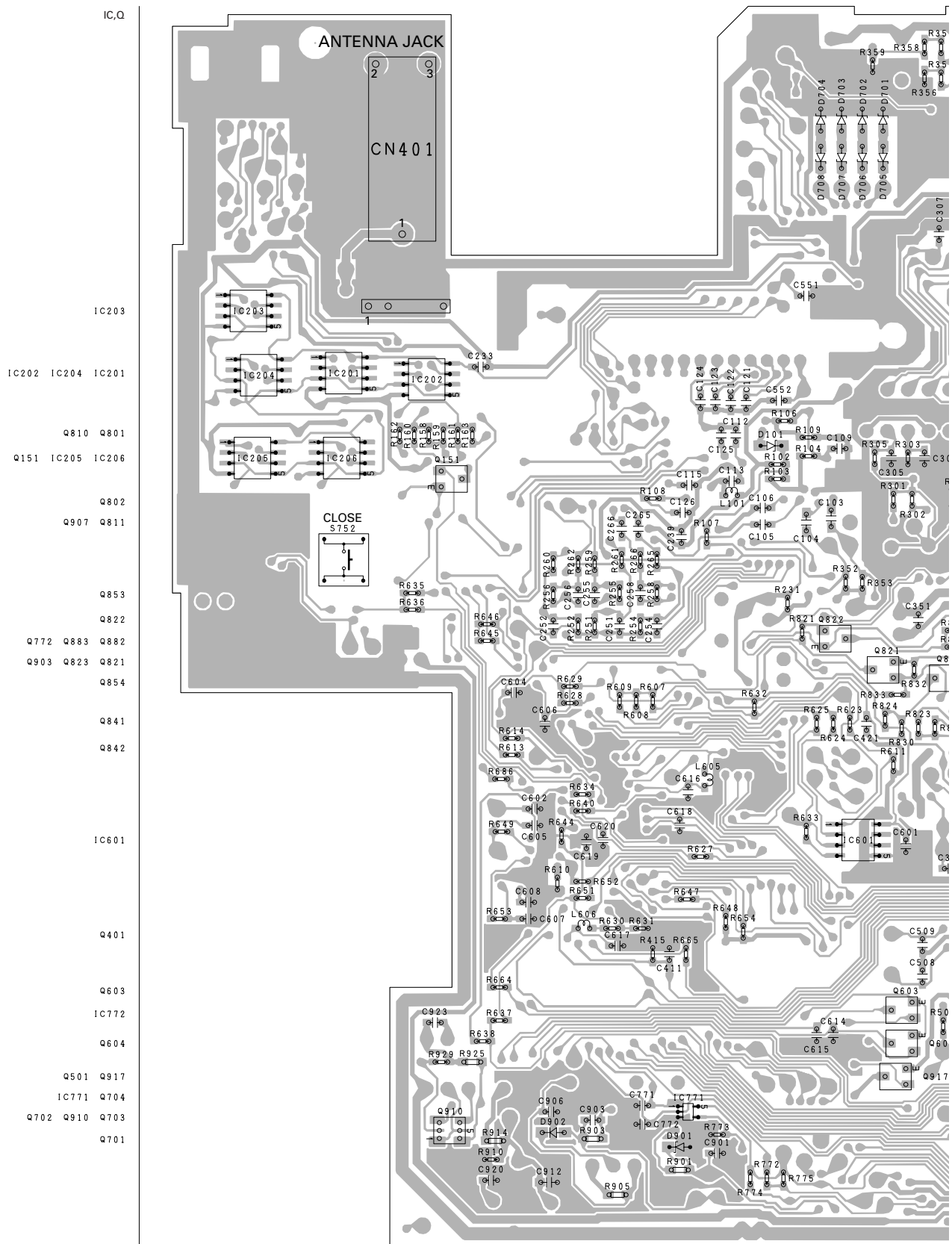
52

AVX-MG2037ZF/XN/UC

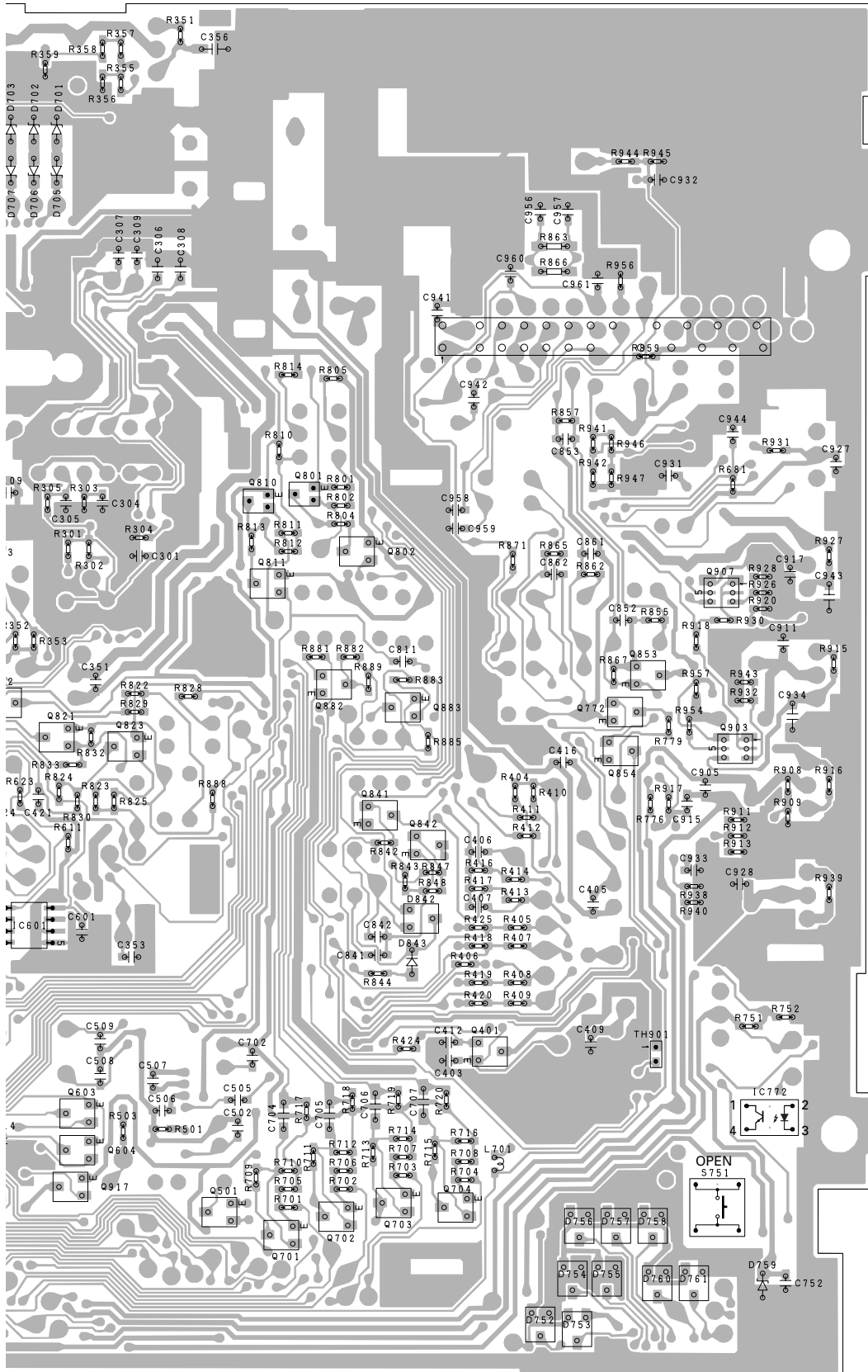




# A TUNER AUDIO UNIT



SIDE B







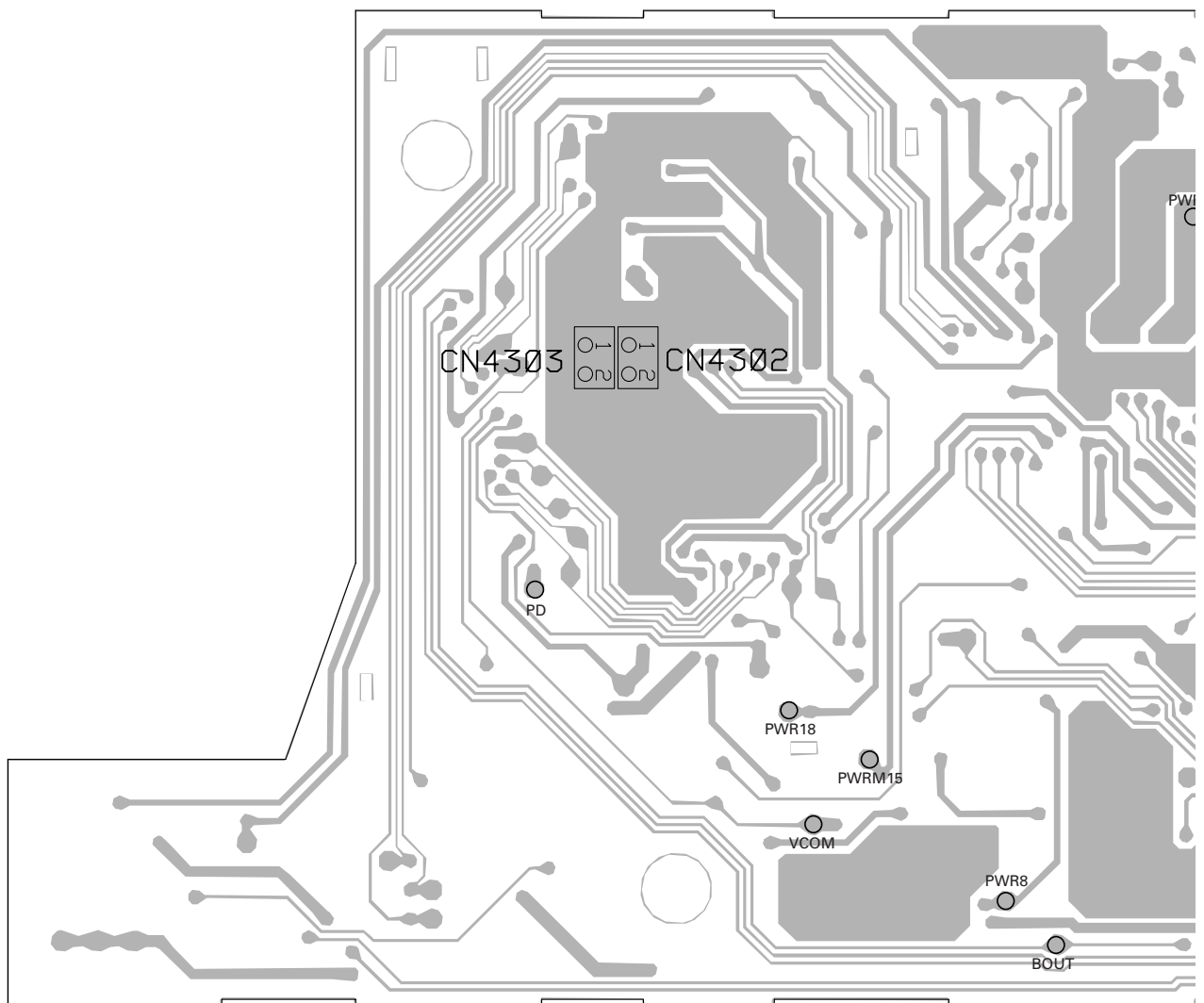
A

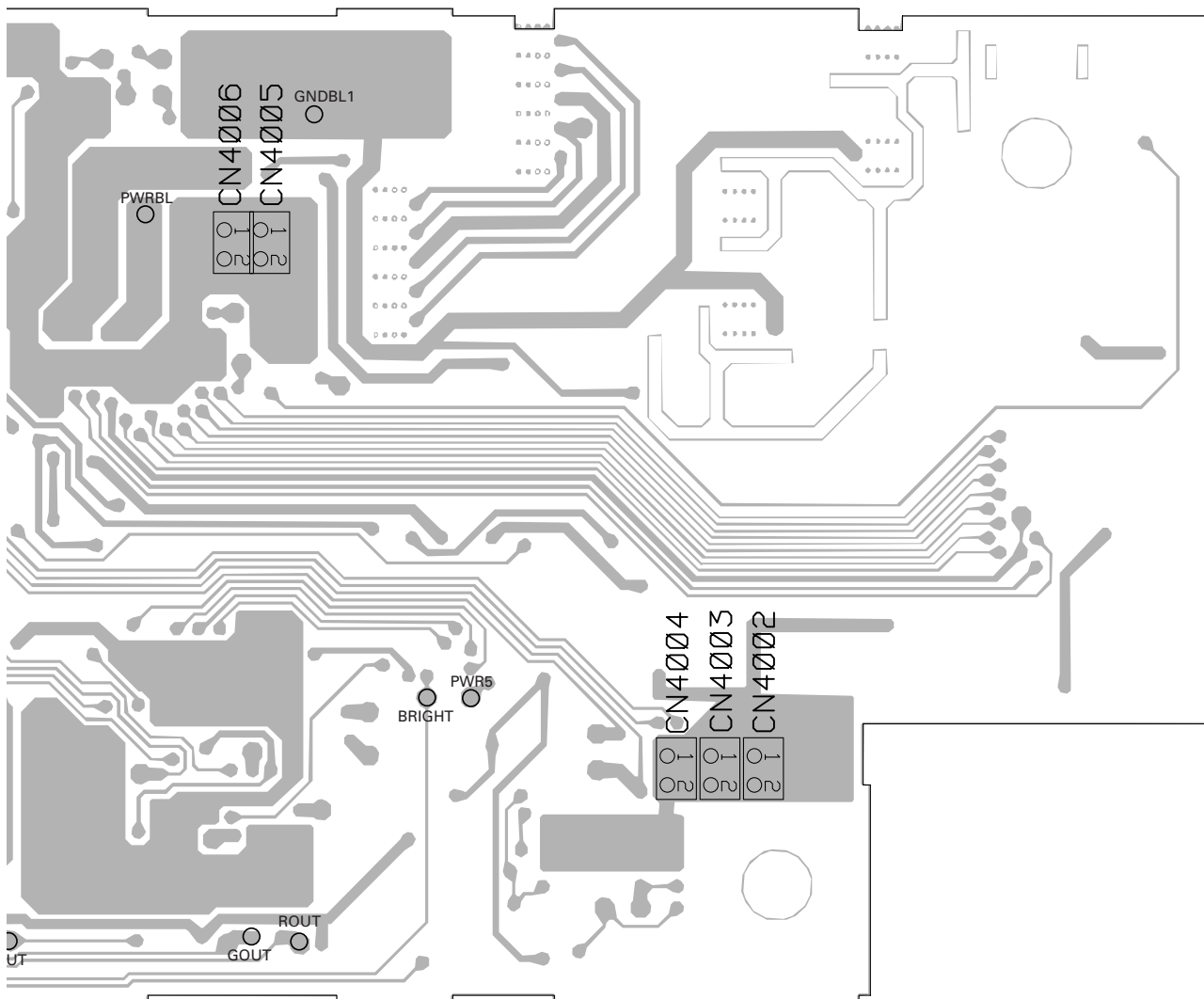
# C MODULE UNIT

B

C

D



**SIDE B**



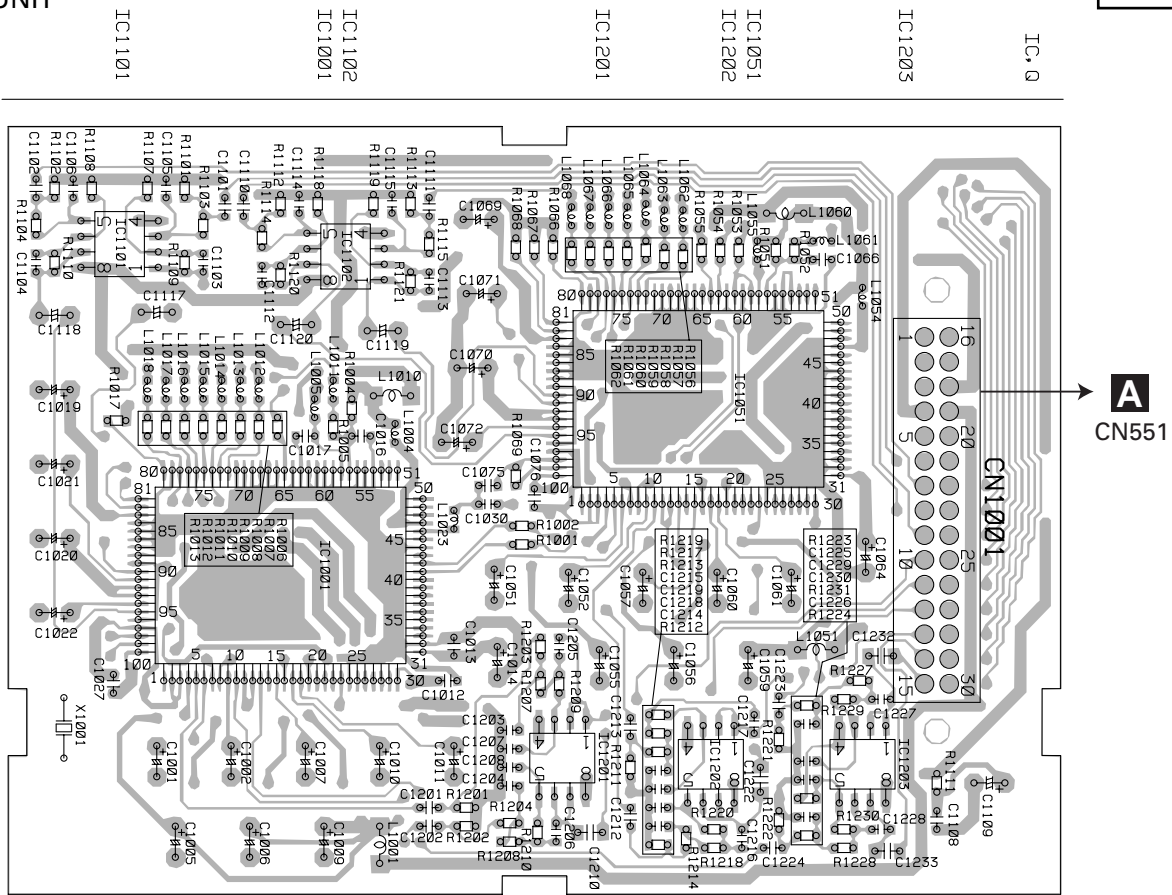
### 4.3 DSP UNIT

## B DSP UNIT

**SIDE A**

A

B

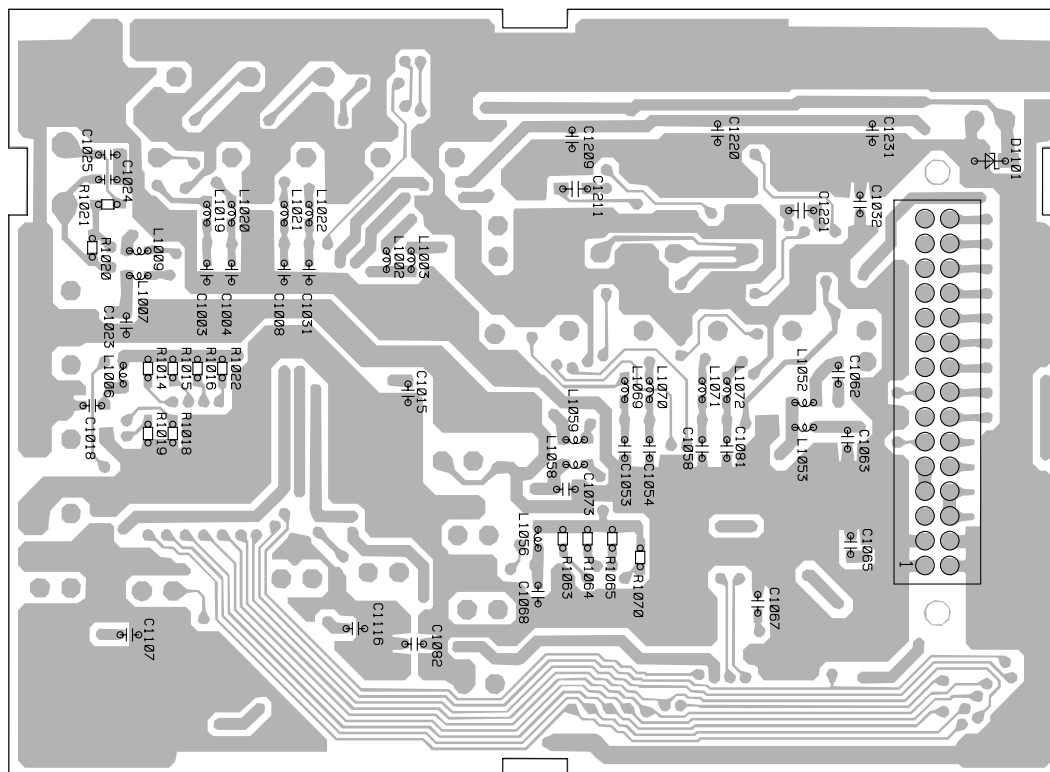


**B** DSP UNIT

## SIDE B

C

D

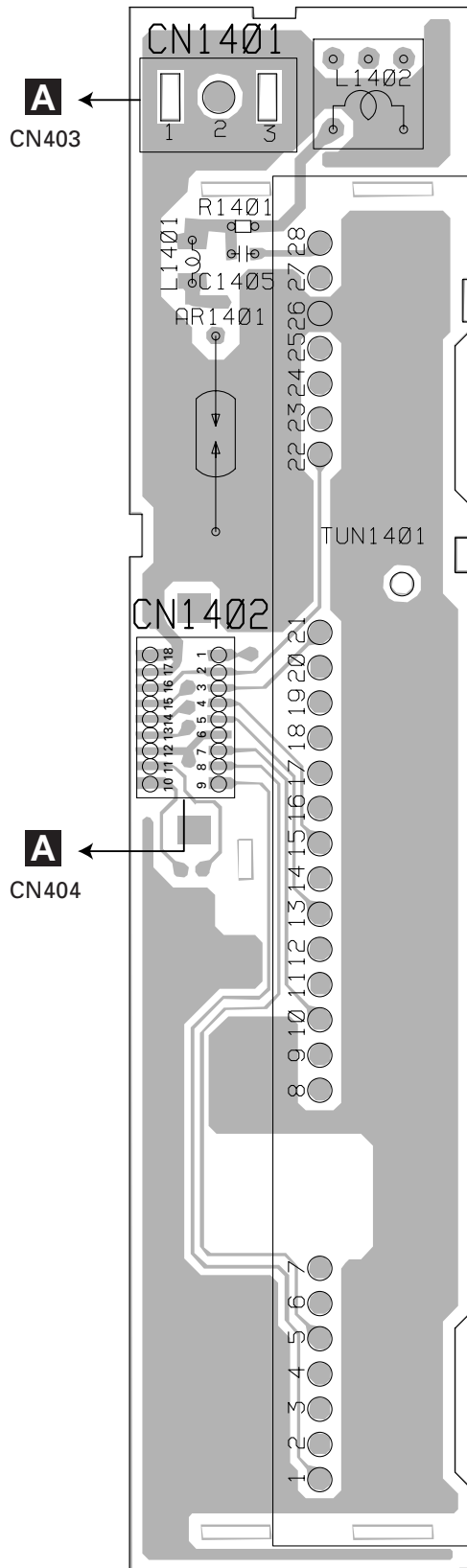




## 4.4 TUNER PCB

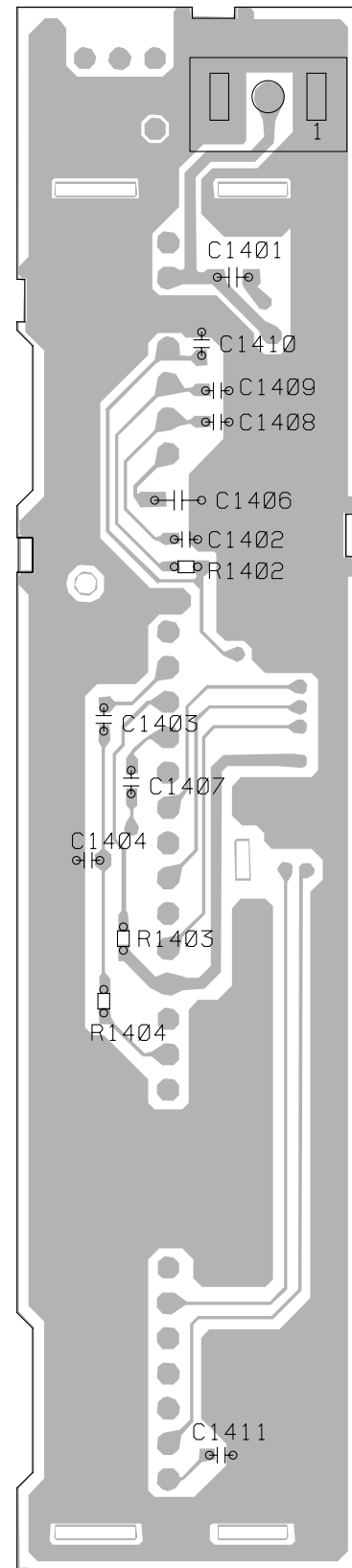
**D** TUNER PCB

**SIDE A**



**D** TUNER PCB

**SIDE B**

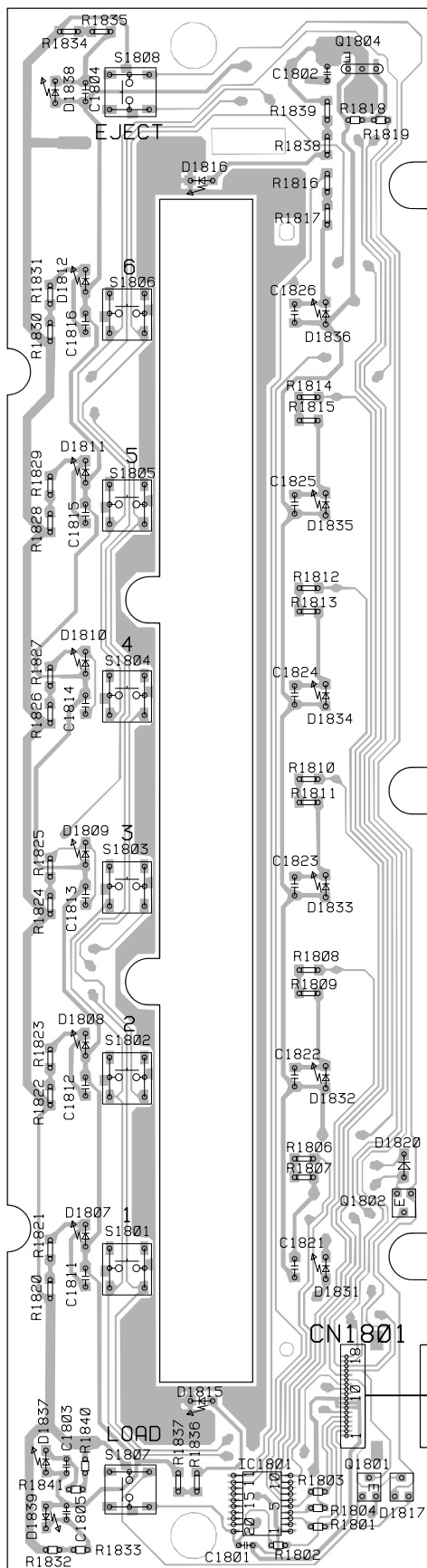




## 4.6 PANEL PCB UNIT

**F** PANEL PCB UNIT

**SIDE A**



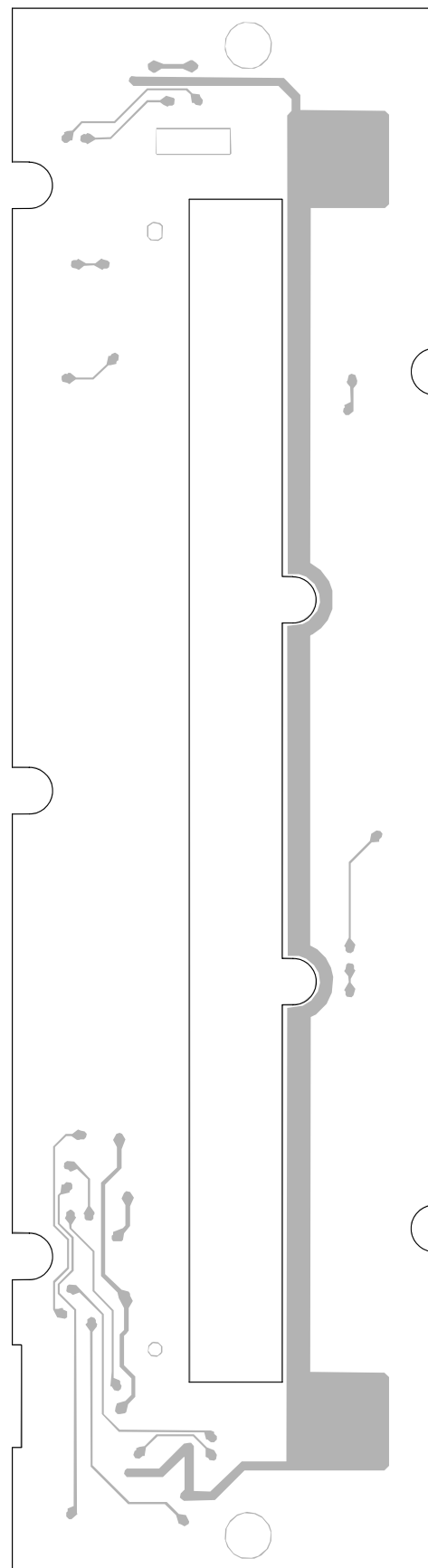
IC, Q  
Q1804

Q1802

Q1801  
IC1801

**F** PANEL PCB UNIT

**SIDE B**



4.7 KEYBOARD UNIT

**G** KEYBOARD UNIT

**SIDE A**

**G** KEYBOARD UNIT

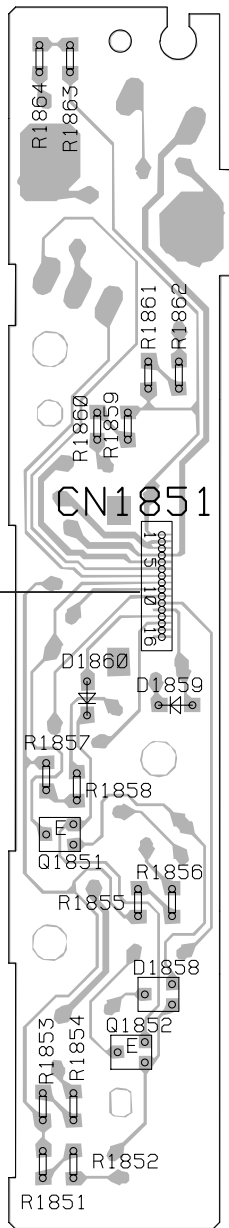
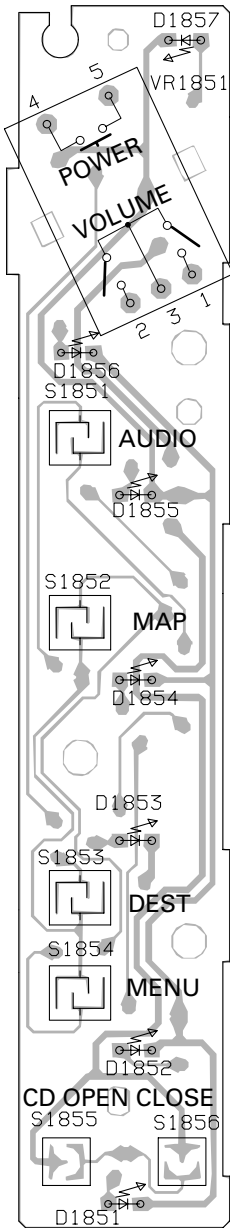
**SIDE B**

A

B

C

D



IC, Q

Q1851

Q1852

■

5

■

6

■

7

■

8

■

A

■

B

■

C

■

D

■

5

■

6

AVX-MG2037ZF/XN/UC

■

7

■

8

■

# 4.8 CONTROL UNIT(G2F)

**H** CONTROL UNIT (G2F)

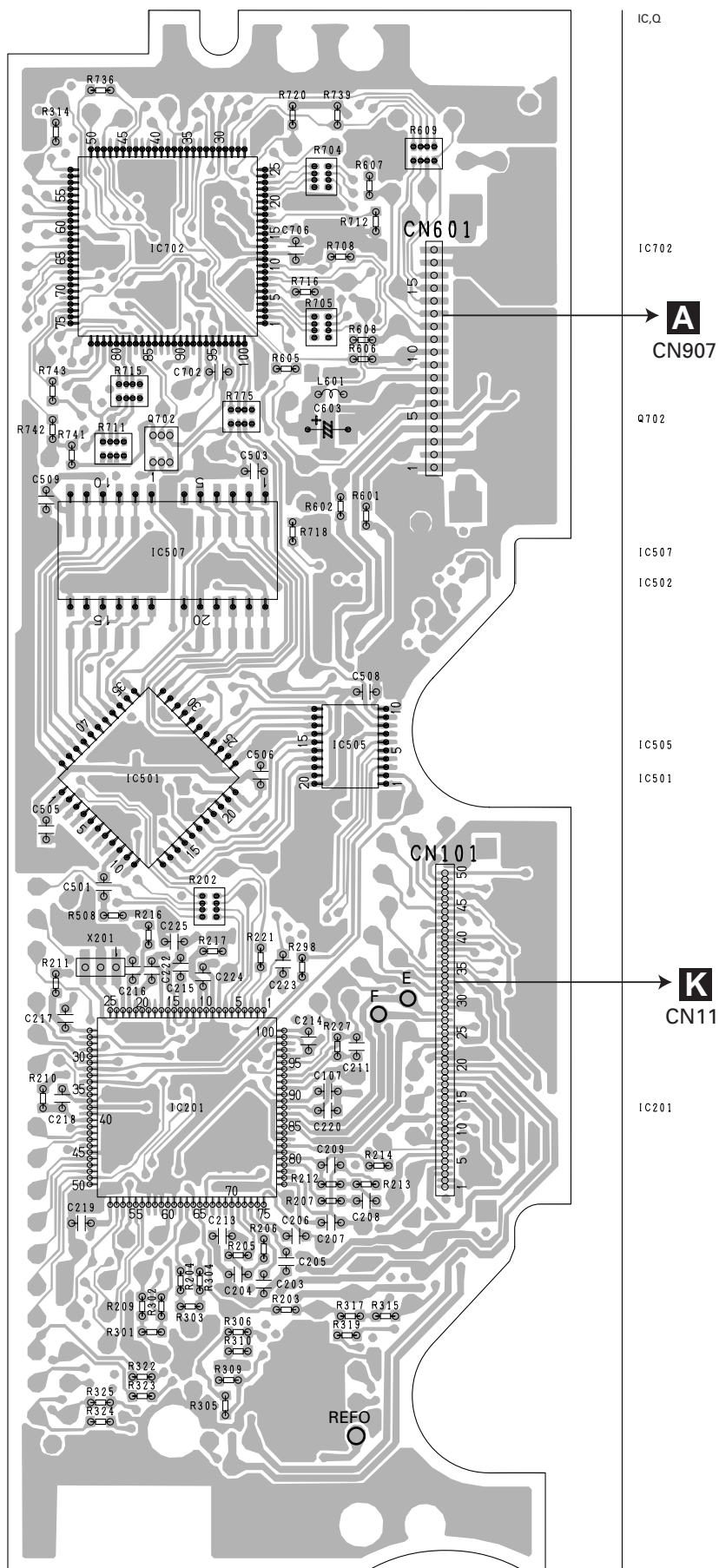
**SIDE A**

A

B

C

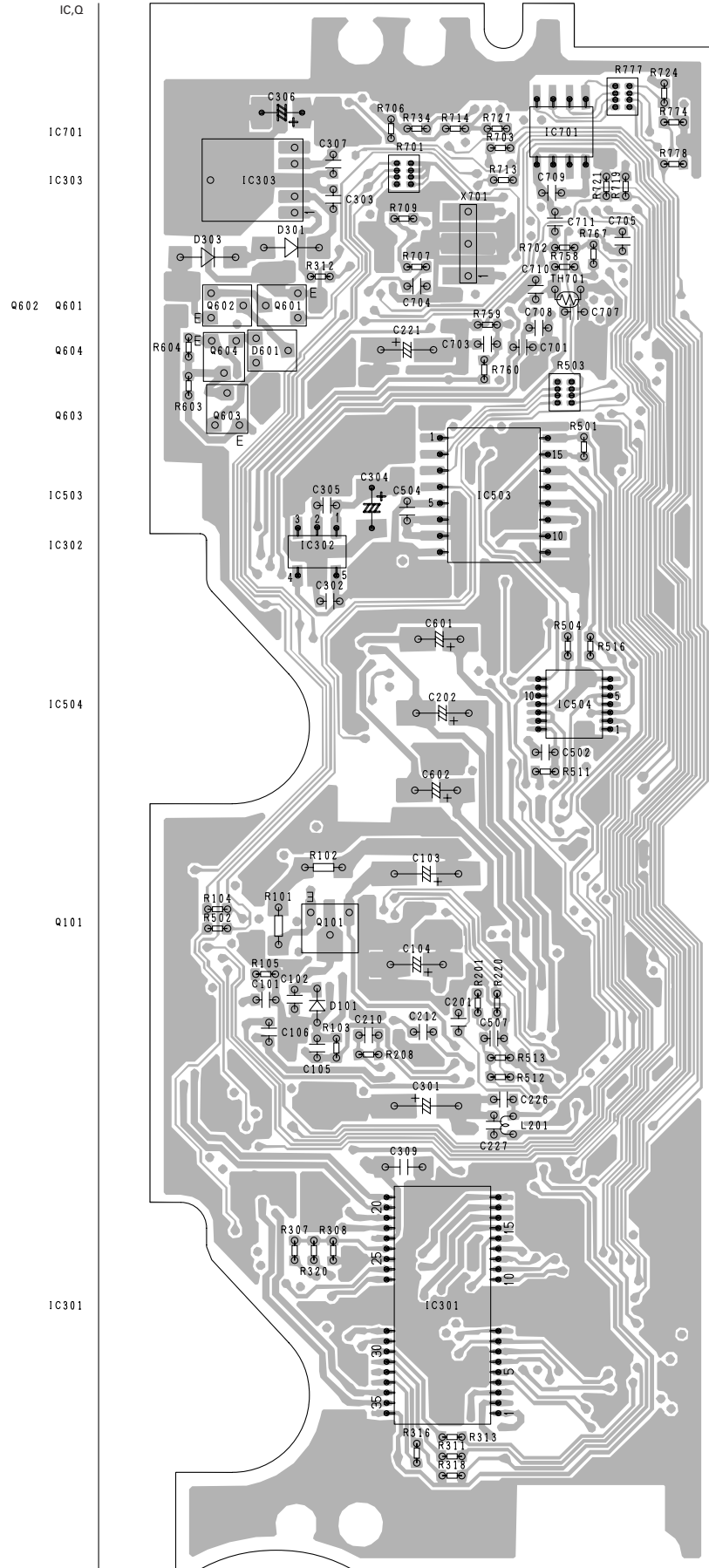
D



**H**



# CONTROL UNIT (G2F)

**SIDE B**


AVX-MG2037ZF/XN/UC

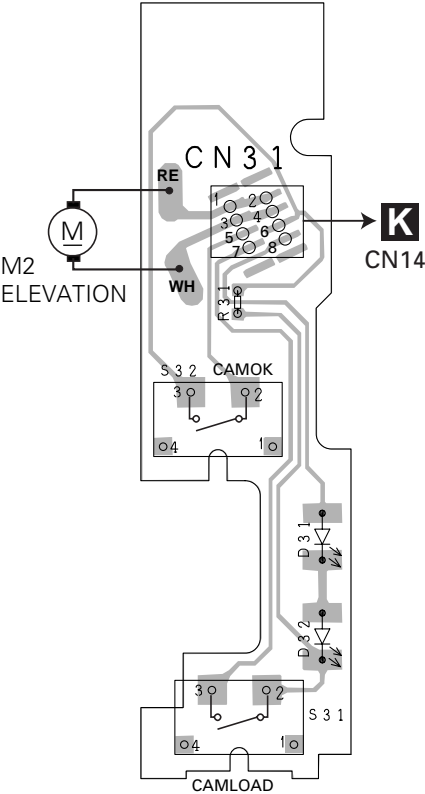


4.9 PCB UNIT(LED),PCB UNIT(LOAD)

**I** PCB UNIT (LED)

**J** PCB UNIT (LOAD)

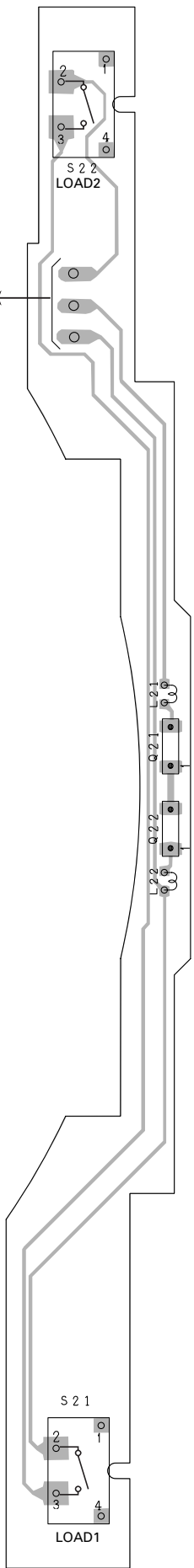
A



B

C

D



IC,Q

Q 2 1

Q 2 2



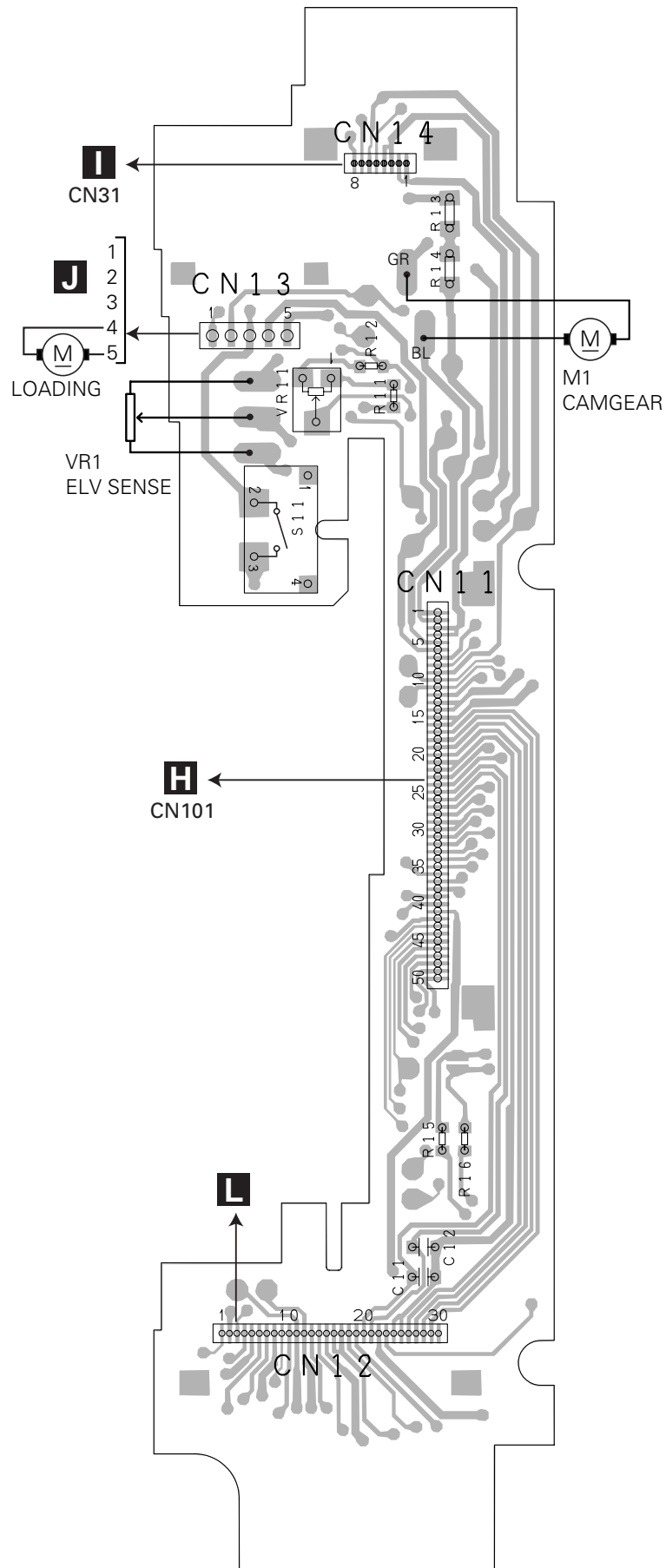
## 4.10 PCB UNIT(SIDE)

**K** PCB UNIT (SIDE)

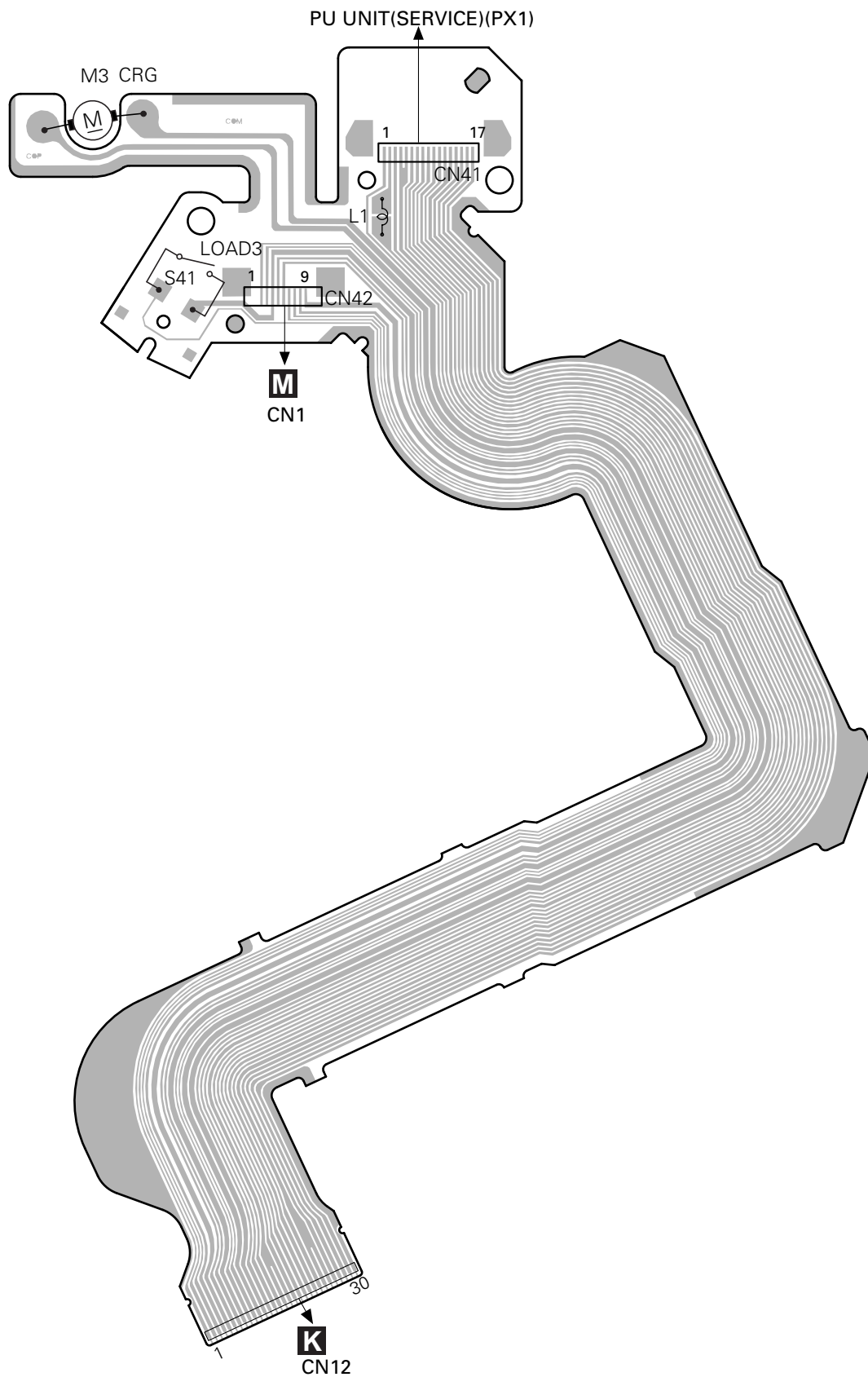
**SIDE A**

**K** PCB UNIT (SIDE)

**SIDE B**

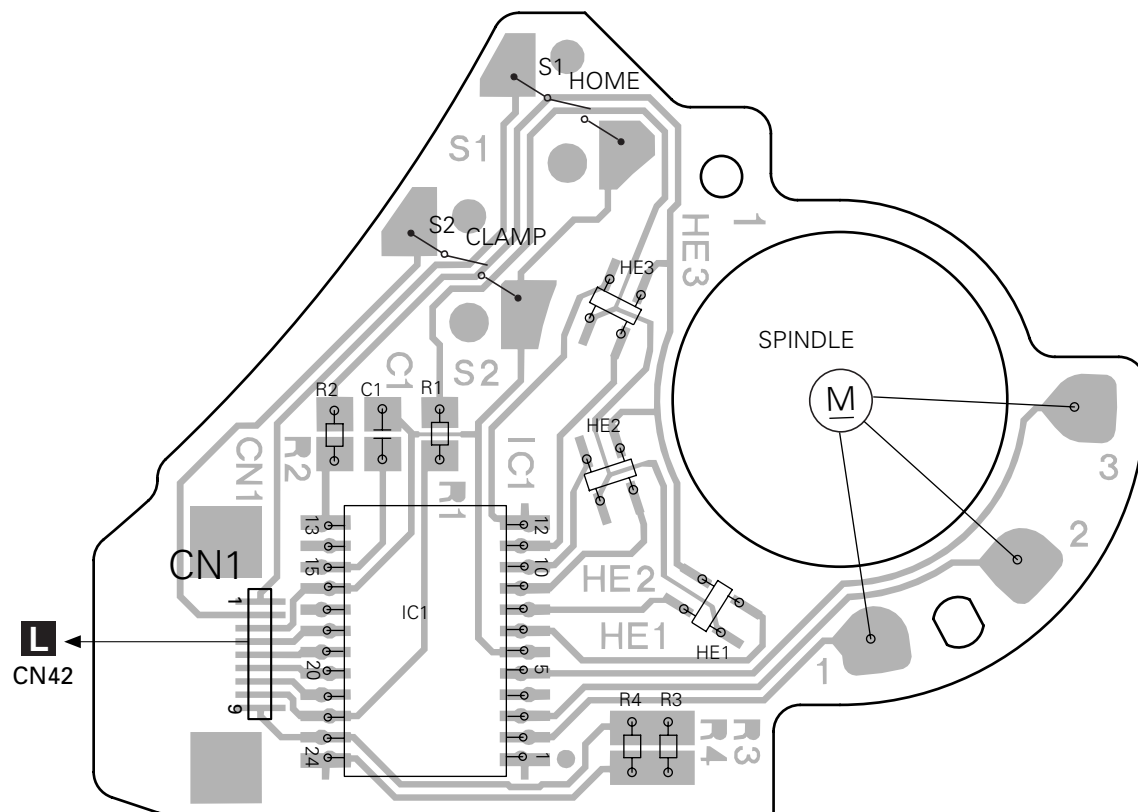


## 4.11 PCB UNIT



## 4.12 PCB UNIT(M2 UNIT)

### **M** PCB UNIT(M2 UNIT)



## 5. ELECTRICAL PARTS LIST

### NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

A

Chip Resistor

RS1/○S○○○○J, RS1/○○S○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

### Circuit Symbol and No. Part NamePart No.

**A**

Unit Number:CWM9102(AVX-MG2037ZF)

Unit Name:Tuner Audio Unit

### MISCELLANEOUS

B

IC 101	IC	PML011A
IC 151	IC	TC7S66F
IC 201	IC	NJM2068MD
IC 202	IC	NJM2068MD
IC 203	IC	NJM2068MD

IC 204	IC	NJM2068MD
IC 206	IC	NJM2068MD
IC 251	IC	NJM4558V
IC 252	IC	NJM4558V
IC 301	IC	DS36277

IC 302	IC	PCA82C250T
IC 303	IC	BA05SFP
IC 501	IC	PM4006B
IC 601	IC	S-93C56BD0I-J8
IC 602	IC	PD5904D

C

IC 603	IC	BU2099FV
IC 604	IC	S-80942CNMC-G9C
IC 771	IC	TC7S86FU
IC 772	Photo-interrupter	GP1S94
IC 773	IC	TC7S14FU

IC 901	IC	TK11835M
IC 902	IC	BA6288FS
IC 903	IC	TK11818M
IC 904	IC	S-812C50AMC-C3E
IC 905	IC	PAJ002A

D

Q 151	Transistor	DTA114EK
Q 201	Transistor	2SC2712
Q 351	Transistor	2SB1185
Q 352	Transistor	IMX1
Q 401	Transistor	2SC2412K

Q 501	Transistor	DTA124EK
Q 602	Transistor	DTC124EU
Q 603	Transistor	DTA124EK
Q 604	Transistor	DTA124EK
Q 701	Transistor	2SC2412K

Q 702	Transistor	2SC2412K
Q 703	Transistor	2SC2412K
Q 704	Transistor	2SC2412K
Q 751	Transistor	IMX1
Q 752	Transistor	2SB1185

### Circuit Symbol and No. Part NamePart No.

Q 753	Transistor	2SB1132
Q 754	Transistor	DTA114EK
Q 771	Transistor	2SB1238
Q 772	Transistor	DTC114EK
Q 801	Transistor	2SA1576

Q 802	Transistor	DTC124EK
Q 803	Transistor	2SA1674
Q 810	Transistor	2SA1576
Q 811	Transistor	DTC124EK
Q 812	Transistor	2SA1674

Q 821	Transistor	2SC2412K
Q 822	Transistor	2SA1162
Q 823	Transistor	2SC2412K
Q 841	Transistor	2SC2412K
Q 842	Transistor	2SC2412K

Q 851	Transistor	DTA114EK
Q 852	Transistor	2SC2412K
Q 853	Transistor	DTC114TK
Q 882	Transistor	2SA1162
Q 883	Transistor	2SC2412K

Q 901	Transistor	2SB1238
Q 902	Transistor	2SB1299
Q 903	Transistor	IMX1
Q 904	Transistor	IMX1
Q 905	Transistor	2SB1185

Q 907	Transistor	IMX1
Q 908	Transistor	DTA124EK
Q 909	Transistor	2SB1185
Q 910	Transistor	IMX1
Q 911	Transistor	2SB1238

Q 912	Transistor	2SB1299
Q 913	Transistor	2SB1185
Q 914	Transistor	IMX1
Q 916	Transistor	DTA124EK
D 101	Diode	HZU3R3(B2)

D 213	Diode	HZS5LL(B)
D 301	Diode	HZS20L(2)
D 302	Diode	HZS20L(2)
D 303	Diode	HZS20L(2)
D 304	Diode	HZS20L(2)

D 351	Diode	HZS9L(A1)
D 352	Diode	MA111
D 701	Diode	UDZ18(B)
D 702	Diode	UDZ18(B)
D 703	Diode	UDZ18(B)

D 704	Diode	UDZ18(B)
D 705	Diode	UDZ18(B)
D 706	Diode	UDZ18(B)
D 707	Diode	UDZ18(B)

Circuit Symbol and No. Part NamePart No.			Circuit Symbol and No. Part NamePart No.		
D 708	Diode	UDZ18(B)	L 701	Inductor	CTF1379
D 751	Diode	HZS6L(B2)	L 751	Inductor	LAU2R2K
D 752	Diode	MA153	L 901	Inductor	CTF1499
D 753	Diode	MA153	L 902	Choke Coil 100µH	CTH1196
D 754	Diode	MA153	L 903	Transformer	CTX1088
D 755	Diode	MA153	L 905	Choke Coil 1.4mH	CTH1129
D 756	Diode	MA153	TH901	Thermistor	CCX1051
D 757	Diode	MA153	X 501	Crystal Resonator 4.332MHz	CSS1056
D 758	Diode	MA153	X 601	Radiator 16MHz	CSS1571
D 759	Diode	UDZ10(B)	X 602	Radiator 32.768kHz	CSS1319
D 760	Diode	MA153	S 751	Spring Switch(OPEN)	CSN1046
D 761	Diode	MA153	S 752	Spring Switch(CLOSE)	CSN1046
D 762	Diode	MA153	FU901	Fuse 2A	CEK1176
D 763	Diode	MA153	FU902	Fuse 1.75A	CEK1177
D 801	Diode	1SS133	FB902	Inductor	CTF1449
D 802	Diode	1SS133	FB901	Inductor	CTF1449
D 810	Diode	1SS133	<b>RESISTORS</b>		
D 811	Diode	1SS133	R 102		RS1/16S102J
D 821	Diode	HZS5LL(C)	R 103		RS1/16S103J
D 822	Diode	1SS133	R 104		RS1/16S682J
D 823	Diode	HZS7L(B2)	R 106		RS1/16S102J
D 841	Diode	HZS6L(B2)	R 108		RS1/16S101J
D 842	Diode	MA152WK	R 151		RS1/16S104J
D 843	Diode	MA111	R 152		RS1/16S473J
D 851	Diode	HZS12L(C1)	R 153		RS1/16S473J
D 861	Diode	1SS133	R 154		RS1/16S473J
D 862	Diode	1SS133	R 155		RS1/16S473J
D 863	Diode	1SS133	R 156		RS1/16S104J
D 864	Diode	1SS133	R 157		RS1/16S104J
D 871	Diode	1SS133	R 158		RS1/16S472J
D 872	Diode	1SS133	R 159		RS1/16S472J
D 881	Diode	HZS5LL(C)	R 160		RS1/16S104J
D 882	Diode	MA111	R 161		RS1/16S104J
D 883	Diode	HZS7L(B2)	R 162		RS1/16S472J
D 901	Diode	HZU7R5(B3)	R 163		RS1/16S472J
D 902	Diode	RB500V-40	R 164		RS1/16S391J
D 903	Diode	HZS5LL(A)	R 165		RS1/16S912J
D 904	Diode	HZS18L(3)	R 201		RS1/16S822J
D 905	Diode	MA728	R 202		RS1/16S822J
D 906	Diode	HZU8R2(B1)	R 203		RS1/16S472J
D 907	Diode	MA728	R 204		RS1/16S472J
D 908	Diode	UDZ8R2(B)	R 205		RS1/16S470J
D 909	Diode	RM4Z-LFJ1	R 206		RS1/16S470J
D 921	Diode	ERA15-02VH	R 207		RS1/16S472J
D 922	Diode	1SS133	R 208		RS1/16S472J
D 923	Diode	1SS133	R 209		RS1/16S470J
L 101	Inductor	CTF1379	R 210		RS1/16S470J
L 351	Inductor	LCTA2R2J2520	R 211		RS1/16S822J
L 403	Inductor	LAU1R0K	R 212		RS1/16S822J
L 404	Inductor	LAU1R0K	R 213		RS1/16S470J
L 501	Inductor	LAU2R2K	R 214		RS1/16S470J
L 502	Inductor	LAU2R2K	R 215		RS1/16S472J
L 551	Inductor	LAU1R0K	R 216		RS1/16S472J
L 552	Inductor	LAU1R0K	R 217		RS1/16S472J
L 601	Chip-Inductor	LCTA2R2J3225	R 218		RS1/16S472J
L 602	Inductor	LCTA2R2J2520	R 219		RS1/16S470J
L 603	Inductor	CTF1379	R 220		RS1/16S470J
L 604	Inductor	CTF1379	R 226		RS1/16S822J
L 605	Inductor	CTF1306	R 227		RS1/16S470J
L 606	Inductor	CTF1306			

**Circuit Symbol and No. Part NamePart No.**

R 228	RS1/16S472J
R 229	RS1/16S472J
R 230	RS1/16S470J
R 231	RS1/16S102J
R 232	RS1/16S272J
R 233	RS1/16S473J
R 234	RS1/16S473J
R 236	RS1/16S473J
R 237	RS1/16S472J
R 238	RS1/16S472J
R 240	RS1/16S472J
R 251	RS1/16S333J
R 252	RS1/16S333J
R 253	RS1/16S333J
R 254	RS1/16S333J
R 255	RS1/16S333J
R 256	RS1/16S333J
R 257	RS1/16S333J
R 258	RS1/16S333J
R 259	RS1/16S753J
R 260	RS1/16S753J
R 261	RS1/16S753J
R 262	RS1/16S753J
R 263	RS1/16S753J
R 264	RS1/16S753J
R 265	RS1/16S753J
R 266	RS1/16S753J
R 301	RS1/16S223J
R 302	RS1/16S472J
R 303	RS1/16S472J
R 304	RS1/16S273J
R 305	RS1/16S472J
R 306	RD1/4PU470J
R 307	RD1/4PU470J
R 308	RS1/16S102J
R 351	RS1/16S223J
R 352	RS1/16S223J
R 353	RS1/16S223J
R 354	RS1/16S332J
R 355	RS1/16S121J
R 356	RS1/16S121J
R 357	RS1/16S221J
R 358	RS1/16S221J
R 359	RS1/16S222J
R 404	RS1/16S473J
R 405	RS1/16S681J
R 406	RS1/16S103J
R 407	RS1/16S681J
R 408	RS1/16S681J
R 409	RS1/16S681J
R 410	RS1/16S473J
R 411	RS1/16S681J
R 412	RS1/16S681J
R 413	RS1/16S272J
R 414	RS1/16S272J
R 415	RS1/16S393J
R 416	RS1/16S162J
R 417	RS1/16S162J
R 418	RS1/16S472J
R 419	RS1/16S473J

**Circuit Symbol and No. Part NamePart No.**

R 420	RS1/16S473J
R 424	RS1/16S222J
R 425	RS1/16S473J
R 501	RS1/16S393J
R 503	RS1/16S681J
R 504	RAB4C102J
R 505	RS1/16S102J
R 602	RS1/16S473J
R 603	RS1/16S473J
R 605	RS1/16S102J
R 607	RS1/16S474J
R 608	RS1/16S474J
R 609	RS1/16S474J
R 610	RS1/16S0R0J
R 611	RS1/16S473J
R 612	RS1/16S471J
R 613	RS1/16S102J
R 614	RS1/16S102J
R 615	RAB4C471J
R 619	RS1/16S471J
R 620	RS1/16S471J
R 621	RS1/16S471J
R 622	RAB4C471J
R 623	RS1/16S102J
R 624	RS1/16S102J
R 625	RS1/16S102J
R 626	RAB4C471J
R 627	RS1/16S471J
R 628	RS1/16S474J
R 629	RS1/16S474J
R 630	RS1/16S274J
R 631	RS1/16S274J
R 632	RS1/16S473J
R 633	RS1/16S103J
R 634	RS1/16S102J
R 635	RS1/16S274J
R 636	RS1/16S102J
R 637	RS1/16S274J
R 638	RS1/16S102J
R 640	RS1/16S102J
R 641	RAB4C102J
R 642	RS1/16S102J
R 643	RS1/16S102J
R 644	RS1/16S473J
R 649	RS1/16S0R0J
R 651	RS1/16S124J
R 652	RS1/16S102J
R 653	RS1/16S0R0J
R 654	RS1/16S473J
R 655	RAB4C102J
R 656	RS1/16S473J
R 657	RAB4C102J
R 659	RS1/16S471J
R 661	RS1/16S102J
R 662	RAB4C102J
R 663	RAB4C473J
R 664	RS1/16S472J
R 665	RS1/16S471J
R 666	RS1/16S102J
R 667	RS1/16S102J

**Circuit Symbol and No. Part NamePart No.**

R 668	RAB4C0R0J
R 669	RAB4C102J
R 680	RS1/16S473J
R 681	RS1/16S274J
R 685	RS1/16S102J
R 686	RS1/16S102J
R 688	RS1/16S471J
R 689	RS1/16S471J
R 693	RS1/16S102J
R 701	RS1/16S0R0J
R 702	RS1/16S0R0J
R 703	RS1/16S0R0J
R 704	RS1/16S0R0J
R 705	RS1/16S102J
R 706	RS1/16S102J
R 707	RS1/16S102J
R 708	RS1/16S102J
R 709	RS1/16S223J
R 710	RS1/16S223J
R 711	RS1/16S223J
R 712	RS1/16S223J
R 713	RS1/16S223J
R 714	RS1/16S223J
R 715	RS1/16S223J
R 716	RS1/16S223J
R 751	RS1/16S222J
R 752	RS1/16S222J
R 753	RS1/16S681J
R 754	RS1/16S105J
R 755	RS1/16S821J
R 757	RS1/16S223J
R 758	RS1/16S222J
R 759	RS1/16S222J
R 761	RS1/16S681J
R 762	RS1/16S473J
R 763	RS1/16S681J
R 764	RS1/16S681J
R 771	RS1/16S222J
R 772	RS1/16S222J
R 773	RS1/16S473J
R 774	RS1/16S103J
R 775	RS1/16S103J
R 776	RS1/16S473J
R 777	RS1/16S681J
R 778	RS1/16S681J
R 779	RS1/16S332J
R 801	RS1/16S220J
R 802	RS1/16S103J
R 803	RS1/16S103J
R 804	RS1/16S822J
R 805	RS1/16S103J
R 806	RD1/4PU101J
R 810	RS1/16S220J
R 811	RS1/16S103J
R 812	RS1/16S103J
R 813	RS1/16S822J
R 814	RS1/16S103J
R 815	RD1/4PU101J
R 821	RS1/16S392J
R 822	RS1/16S471J

**Circuit Symbol and No. Part NamePart No.**

R 823	RS1/16S473J
R 824	RS1/16S683J
R 825	RS1/16S473J
R 826	RD1/4PU101J
R 827	RD1/4PU102J
R 828	RS1/16S103J
R 829	RS1/16S471J
R 830	RS1/16S272J
R 832	RS1/16S223J
R 833	RS1/16S223J
R 841	RD1/4PU472J
R 842	RS1/16S222J
R 843	RS1/16S473J
R 844	RS1/16S333J
R 846	RS1/16S473J
R 847	RS1/16S103J
R 848	RS1/16S473J
R 851	RS1/16S473J
R 852	RS1/16S473J
R 853	RS1/16S473J
R 854	RS1/16S104J
R 855	RS1/16S473J
R 856	RS1/16S473J
R 858	RD1/4PU102J
R 860	RS1/16S473J
R 862	RS1/16S103J
R 863	RS1/8S362J
R 864	RD1/4PU471J
R 865	RS1/16S103J
R 866	RS1/8S362J
R 867	RS1/16S273J
R 868	RD1/4PU471J
R 871	RS1/16S102J
R 872	RS1/16S102J
R 873	RS1/16S102J
R 874	RS1/16S102J
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R 876	RS1/16S102J
R 881	RS1/16S392J
R 882	RS1/16S471J
R 883	RS1/16S473J
R 884	RS1/16S683J
R 885	RS1/16S473J
R 886	RD1/4PU101J
R 887	RS1/16S102J
R 888	RS1/16S103J
R 889	RS1/16S471J
R 890	RS1/16S102J
R 901	RS1/10S470J
R 902	RS1/10SR68J
R 903	RN1/10SK3903D
R 904	RS1/10S511J
R 905	RS1/10S151J
R 906	RN1/10SE3302D
R 907	RN1/10SK4303D
R 908	RS1/16S681J
R 909	RS1/16S621J
R 910	RS1/16S333J
R 911	RS1/16S471J
R 912	RS1/16S471J

**Circuit Symbol and No. Part NamePart No.**

R 913 RS1/16S471J  
 R 914 RS1/10S122J  
 R 915 RS1/16S223J

R 916 RS1/16S223J  
 R 917 RS1/16S332J  
 R 918 RS1/16S332J  
 R 919 RS1/10S102J  
 R 920 RS1/16S222J

R 921 RS1/16S472J  
 R 922 RS1/10S471J  
 R 923 RS1/16S821J  
 R 924 RS1/16S821J  
 R 925 RS1/10S681J

R 926 RS1/16S511J  
 R 927 RS1/16S223J  
 R 928 RS1/16S511J  
 R 929 RS1/16S472J  
 R 930 RS1/16S332J

R 931 RS1/16S124J  
 R 932 RS1/16S511J  
 R 933 RS1/16S102J  
 R 934 RD1/4PU2R2J  
 R 935 RD1/4PU2R2J

R 936 RS1/16S222J  
 R 937 RS1/16S911J  
 R 938 RS1/16S511J  
 R 939 RS1/16S223J  
 R 940 RS1/16S511J

R 941 RS1/16S224J  
 R 942 RS1/16S104J  
 R 943 RS1/16S511J  
 R 944 RS1/16S822J  
 R 945 RS1/16S332J

R 946 RS1/16S274J  
 R 947 RS1/16S104J  
 R 948 RS1/16S0R0J  
 R 949 RS1/16S0R0J  
 R 950 RS1/16S911J

R 951 RS1/16S102J  
 R 952 RS1/16S153J  
 R 953 RS1/16S332J  
 R 954 RS1/16S471J  
 R 955 RS1/4SA101J

R 956 RS1/16S0R0J  
 R 957 RS1/16S222J

**CAPACITORS**

C 101 CKSQYB225K10  
 C 102 CKSQYB225K10  
 C 103 CKSQYB225K10  
 C 104 CKSQYB225K10  
 C 105 CKSRYB224K16

C 106 CKSRYB224K16  
 C 107 CKSRYB474K10  
 C 108 CKSRYB474K10  
 C 109 CKSRYB104K16  
 C 110 CKSYB106K6R3

C 111 CKSYB106K6R3  
 C 112 CKSRYB105K10  
 C 113 CKSRYB104K16

**Circuit Symbol and No. Part NamePart No.**

C 114 CCSRCH101J50  
 C 116 CCSRCH101J50

C 117 CKSYB106K6R3  
 C 118 CKSYB106K6R3  
 C 120 CKSYB106K6R3  
 C 121 CKSRYB472K50  
 C 122 CKSRYB472K50

C 123 CCSRCH471J50  
 C 124 CCSRCH471J50  
 C 125 CKSRYB473K50  
 C 126 CCSRCH101J50  
 C 151 CKSRYB103K50

C 152 CKSYB106K6R3  
 C 153 CKSYB106K6R3  
 C 154 CKSRYB105K10  
 C 155 CKSRYB222K50  
 C 156 CKSRYB105K10

C 201 CCSRCH101J50  
 C 202 CCSRCH101J50  
 C 203 CCSRCH101J50  
 C 204 CCSRCH101J50  
 C 207 CKSRYB102K50

C 208 CKSRYB102K50  
 C 209 CKSRYB102K50  
 C 210 CKSRYB102K50  
 C 213 CCSRCH101J50  
 C 214 CCSRCH101J50

C 215 CCSRCH101J50  
 C 216 CCSRCH101J50  
 C 219 CKSRYB102K50  
 C 220 CKSRYB102K50  
 C 221 CKSRYB102K50

C 222 CKSRYB102K50  
 C 231 CCSRCH101J50  
 C 232 CCSRCH101J50  
 C 233 CCSRCH101J50  
 C 234 CKSRYB102K50

C 235 CKSRYB102K50  
 C 236 CCSRCH101J50  
 C 237 CEAT331M6R3  
 C 238 CEAL100M16  
 C 239 CCSRCH101J50

C 251 CCSRCH470J50  
 C 252 CCSRCH470J50  
 C 253 CCSRCH470J50  
 C 254 CCSRCH470J50  
 C 255 CCSRCH470J50

C 256 CCSRCH470J50  
 C 257 CCSRCH470J50  
 C 258 CCSRCH470J50  
 C 259 10μF CCG1138  
 C 260 10μF CCG1138

C 261 10μF CCG1138  
 C 262 10μF CCG1138  
 C 263 10μF CCG1138  
 C 264 10μF CCG1138  
 C 265 CKSRYB105K10

C 266 CKSRYB105K10  
 C 301 CKSRYB223K50  
 C 302 CEAL100M16



**Circuit Symbol and No. Part NamePart No.**

C 303	CEAL220M10
C 304	CKSRYB222K50
C 305	CKSRYB222K50
C 306	CCSQCH101J50
C 307	CCSRCH181J50
C 308	CCSQCH101J50
C 309	CCSRCH181J50
C 351	CKSRYB102K50
C 352	CEJQ101M16
C 353	CKSRYB104K16
C 354	CEAL100M16
C 355	CASA4R7M16
C 357	CKSRYB105K6R3
C 358	CKSYB106K6R3
C 405	CKSRYB103K50
C 406	CKSRYB183K50
C 407	CKSRYB183K50
C 408	CEJQ101M6R3
C 409	CKSRYB103K50
C 410	CEJQ101M16
C 411	CKSRYB472K50
C 412	CKSRYB103K50
C 421	CKSRYB683K16
C 501	CEAL100M16
C 502	CKSRYB104K16
C 503	CKSYB106K6R3
C 504	CKSRYB104K16
C 505	CKSRYB105K10
C 506	CKSRYB104K16
C 507	CKSRYB472K50
C 508	CCSRCH220J50
C 509	CCSRCH220J50
C 551	CKSRYB102K50
C 552	CKSRYB102K50
C 601	CKSRYB104K16
C 602	CCSRCH180J50
C 603	CKSYB106K6R3
C 604	CCSRCH101J50
C 605	CCSRCH180J50
C 607	CCSRCH220J50
C 608	CCSRCH180J50
C 609	CKSRYB104K16
C 610	CKSRYB102K50
C 611	CKSRYB103K50
C 612	CKSRYB103K50
C 613	CKSRYB103K50
C 614	CKSRYB102K50
C 615	CKSRYB102K50
C 616	CKSRYB104K16
C 617	CKSRYB104K16
C 618	CCSRCH101J50
C 619	CKSRYB104K16
C 620	CCSRCH101J50
C 702	CKSRYB103K50
C 703	CEAL470M10
C 704	CKSYB475K10
C 705	CKSYB475K10
C 706	CKSYB475K10
C 707	CKSYB475K10
C 751	CKSRYB104K16

**Circuit Symbol and No. Part NamePart No.**

C 752	CKSRYB104K16
C 771	CCSRCH681J50
C 772	CCSRCH681J50
C 801	CKSRYB103K50
C 810	CKSRYB103K50
C 811	CCSRCH101J50
C 841	CCSRCH221J50
C 842	CKSRYB103K50
C 852	CKSRYB102K50
C 853	CCSRCH181J50
C 861	CKSRYB473K50
C 862	CKSRYB473K50
C 871	CKSRYB103K50
C 881	CKSRYB224K16
C 901	CKSRYB105K10
C 902	CASA470M20
C 903	CKSRYB102K50
C 904	CKSRYB104K25
C 905	CKSRYB104K16
C 906	CKSRYB105K10
C 907	CEHAR470M16
C 908	CEJQ470M10
C 909	CEHAT331M10
C 910	CCSRCH101J50
C 911	CKSRYB102K50
C 912	CKSQYB104K25
C 913	CEJQ4R7M35
C 914	CCSRCH101J50
C 915	CKSRYB104K16
C 916	CEJQ100M25
C 917	CKSRYB102K50
C 918	CEHAT331M10
C 919	CKSRYB223K50
C 920	CKSRYB104K25
C 921	CEJQ220M10
C 922	CASA330M10
C 923	CKSRYB103K50
C 924	CEJQ470M6R3
C 925	470μF/6.3V
C 926	100μF/10V
C 927	CKSRYB103K50
C 928	CKSRYB105K10
C 929	CEHAR101M10
C 930	3300μF/16V
C 931	CCH1163(P35)
C 932	CKSRYB103K50
C 933	CKSRYB104K25
C 934	CKSYB105K16
C 937	CEAT102M16(P35)
C 938	CKSRYB103K50
C 939	CKSRYB103K50
C 940	0.1F/5.5V
C 941	CKSRYB473K50
C 942	CKSRYB104K25
C 943	CKSYB105K16
C 944	CCSRCH102J50

**A**

**Circuit Symbol and No. Part NamePart No.****Unit Number:CWM9103(AVX-MG2137ZF)****Unit Name:Tuner Audio Unit****MISCELLANEOUS**

A	IC 101	IC	PML011A
	IC 151	IC	TC7S66F
	IC 201	IC	NJM2068MD
	IC 202	IC	NJM2068MD
	IC 203	IC	NJM2068MD
	IC 204	IC	NJM2068MD
	IC 206	IC	NJM2068MD
	IC 251	IC	NJM4558V
	IC 252	IC	NJM4558V
	IC 301	IC	DS36277
	IC 302	IC	PCA82C250T
	IC 303	IC	BA05SFP
	IC 501	IC	PM4006B
	IC 601	IC	S-93C56BD0I-J8
	IC 602	IC	PD5904D
B	IC 603	IC	BU2099FV
	IC 604	IC	S-80942CNMC-G9C
	IC 771	IC	TC7S86FU
	IC 772	Photo-interrupter	GP1S94
	IC 773	IC	TC7S14FU
	IC 901	IC	TK11835M
	IC 902	IC	BA6288FS
	IC 903	IC	TK11818M
	IC 904	IC	S-812C50AMC-C3E
	IC 905	IC	PAJ002A
	Q 151	Transistor	DTA114EK
	Q 201	Transistor	2SC2712
	Q 351	Transistor	2SB1185
	Q 352	Transistor	IMX1
	Q 401	Transistor	2SC2412K
C	Q 501	Transistor	DTA124EK
	Q 602	Transistor	DTC124EU
	Q 603	Transistor	DTA124EK
	Q 604	Transistor	DTA124EK
	Q 701	Transistor	2SC2412K
	Q 702	Transistor	2SC2412K
	Q 703	Transistor	2SC2412K
	Q 704	Transistor	2SC2412K
	Q 751	Transistor	IMX1
	Q 752	Transistor	2SB1185
	Q 753	Transistor	2SB1132
	Q 754	Transistor	DTA114EK
	Q 771	Transistor	2SB1238
	Q 772	Transistor	DTC114EK
	Q 810	Transistor	2SA1576
	Q 811	Transistor	DTC124EK
	Q 812	Transistor	2SA1674
	Q 821	Transistor	2SC2412K
	Q 822	Transistor	2SA1162
	Q 823	Transistor	2SC2412K
D	Q 841	Transistor	2SC2412K
	Q 842	Transistor	2SC2412K
	Q 851	Transistor	DTA114EK
	Q 852	Transistor	2SC2412K
	Q 853	Transistor	DTC114TK

**Circuit Symbol and No. Part NamePart No.**

Q 883	Transistor	2SC2412K
Q 901	Transistor	2SB1238
Q 902	Transistor	2SB1299
Q 903	Transistor	IMX1
Q 904	Transistor	IMX1
Q 905	Transistor	2SB1185
Q 907	Transistor	IMX1
Q 908	Transistor	DTA124EK
Q 909	Transistor	2SB1185
Q 910	Transistor	IMX1
Q 911	Transistor	2SB1238
Q 912	Transistor	2SB1299
Q 913	Transistor	2SB1185
Q 914	Transistor	IMX1
Q 916	Transistor	DTA124EK
D 101	Diode	HZU3R3(B2)
D 213	Diode	HZS5LL(B)
D 301	Diode	HZS20L(2)
D 302	Diode	HZS20L(2)
D 303	Diode	HZS20L(2)
D 304	Diode	HZS20L(2)
D 351	Diode	HZS9L(A1)
D 352	Diode	MA111
D 701	Diode	UDZ18(B)
D 702	Diode	UDZ18(B)
D 703	Diode	UDZ18(B)
D 704	Diode	UDZ18(B)
D 705	Diode	UDZ18(B)
D 706	Diode	UDZ18(B)
D 707	Diode	UDZ18(B)
D 708	Diode	UDZ18(B)
D 751	Diode	HZS6L(B2)
D 752	Diode	MA153
D 753	Diode	MA153
D 754	Diode	MA153
D 755	Diode	MA153
D 756	Diode	MA153
D 757	Diode	MA153
D 758	Diode	MA153
D 759	Diode	UDZ10(B)
D 760	Diode	MA153
D 761	Diode	MA153
D 762	Diode	MA153
D 763	Diode	MA153
D 810	Diode	1SS133
D 811	Diode	1SS133
D 821	Diode	HZS5LL(C)
D 822	Diode	1SS133
D 823	Diode	HZS7L(B2)
D 841	Diode	HZS6L(B2)
D 842	Diode	MA152WK
D 843	Diode	MA111
D 851	Diode	HZS12L(C1)
D 861	Diode	1SS133
D 862	Diode	1SS133
D 863	Diode	1SS133
D 864	Diode	1SS133
D 871	Diode	1SS133
D 872	Diode	1SS133
D 883	Diode	HZS7L(B2)

Circuit Symbol and No. Part NamePart No.			Circuit Symbol and No. Part NamePart No.			
D 901	Diode	HZU7R5(B3)	R 162	RS1/16S472J		
D 902	Diode	RB500V-40	R 163	RS1/16S472J		
D 903	Diode	HZS5LL(A)	R 164	RS1/16S391J		
D 904	Diode	HZS18L(3)	R 165	RS1/16S912J		
D 905	Diode	MA728				
			R 201	RS1/16S562J		
D 906	Diode	HZU8R2(B1)	R 202	RS1/16S562J		A
D 907	Diode	MA728	R 203	RS1/16S472J		
D 908	Diode	UDZ8R2(B)	R 204	RS1/16S472J		
D 909	Diode	RM4Z-LFJ1	R 205	RS1/16S470J		
D 921	Diode	ERA15-02VH				
			R 206	RS1/16S470J		
D 922	Diode	1SS133	R 207	RS1/16S472J		
D 923	Diode	1SS133	R 208	RS1/16S472J		
L 101	Inductor	CTF1379	R 209	RS1/16S470J		
L 351	Inductor	LCTA2R2J2520	R 210	RS1/16S470J		
L 403	Inductor	LAU1R0K				
			R 211	RS1/16S562J		
L 404	Inductor	LAU1R0K	R 212	RS1/16S562J		
L 501	Inductor	LAU2R2K	R 213	RS1/16S470J		
L 502	Inductor	LAU2R2K	R 214	RS1/16S470J		
L 551	Inductor	LAU1R0K	R 215	RS1/16S472J		
L 552	Inductor	LAU1R0K				
			R 216	RS1/16S472J		
L 601	Chip-Inductor	LCTA2R2J3225	R 217	RS1/16S472J		
L 602	Inductor	LCTA2R2J2520	R 218	RS1/16S472J		B
L 603	Inductor	CTF1379	R 219	RS1/16S470J		
L 604	Inductor	CTF1379	R 220	RS1/16S470J		
L 605	Inductor	CTF1306				
			R 226	RS1/16S562J		
L 606	Inductor	CTF1306	R 227	RS1/16S470J		
L 701	Inductor	CTF1379	R 228	RS1/16S472J		
L 751	Inductor	LAU2R2K	R 229	RS1/16S472J		
L 901	Inductor	CTF1499	R 230	RS1/16S470J		
L 902	Choke Coil 100µH	CTH1196				
			R 231	RS1/16S102J		
L 903	Transformer	CTX1088	R 232	RS1/16S272J		
L 905	Choke Coil 1.4mH	CTH1129	R 233	RS1/16S473J		
TH901	Thermistor	CCX1051	R 234	RS1/16S473J		
X 501	Crystal Resonator 4.332MHz	CSS1056	R 236	RS1/16S473J		
X 601	Radiator 16MHz	CSS1571				
			R 237	RS1/16S472J		
X 602	Radiator 32.768kHz	CSS1319	R 238	RS1/16S472J		
S 751	Spring Switch(OPEN)	CSN1046	R 240	RS1/16S472J		
S 752	Spring Switch(CLOSE)	CSN1046	R 251	RS1/16S333J		
FU901	Fuse 2A	CEK1176	R 252	RS1/16S333J		C
FU902	Fuse 1.75A	CEK1177				
			R 253	RS1/16S333J		
FB901	Inductor	CTF1449	R 254	RS1/16S333J		
FB902	Inductor	CTF1449	R 255	RS1/16S333J		
			R 256	RS1/16S333J		
			R 257	RS1/16S333J		
<b>RESISTORS</b>						
R 102		RS1/16S102J	R 258	RS1/16S333J		
R 103		RS1/16S103J	R 259	RS1/16S753J		
R 104		RS1/16S682J	R 260	RS1/16S753J		
R 106		RS1/16S102J	R 261	RS1/16S753J		
R 108		RS1/16S101J	R 262	RS1/16S753J		
R 151		RS1/16S104J	R 263	RS1/16S753J		
R 152		RS1/16S473J	R 264	RS1/16S753J		
R 153		RS1/16S473J	R 265	RS1/16S753J		
R 154		RS1/16S473J	R 266	RS1/16S753J		
R 155		RS1/16S473J	R 301	RS1/16S223J		
R 156		RS1/16S104J	R 302	RS1/16S472J		D
R 157		RS1/16S104J	R 303	RS1/16S472J		
R 158		RS1/16S332J	R 304	RS1/16S273J		
R 159		RS1/16S332J	R 305	RS1/16S472J		
R 160		RS1/16S683J	R 306	RD1/4PU470J		
R 161		RS1/16S683J	R 307	RD1/4PU470J		

**Circuit Symbol and No. Part NamePart No.**

R 308 RS1/16S102J  
R 351 RS1/16S223J  
R 352 RS1/16S223J  
R 353 RS1/16S223J

A R 354 RS1/16S332J  
R 355 RS1/16S121J  
R 356 RS1/16S121J  
R 357 RS1/16S221J  
R 358 RS1/16S221J

R 359 RS1/16S222J  
R 404 RS1/16S473J  
R 405 RS1/16S681J  
R 406 RS1/16S103J  
R 407 RS1/16S681J

R 408 RS1/16S681J  
R 409 RS1/16S681J  
R 410 RS1/16S473J  
R 411 RS1/16S681J  
R 412 RS1/16S681J

B R 413 RS1/16S272J  
R 414 RS1/16S272J  
R 415 RS1/16S393J  
R 416 RS1/16S162J  
R 417 RS1/16S162J

R 418 RS1/16S472J  
R 419 RS1/16S473J  
R 420 RS1/16S473J  
R 424 RS1/16S222J  
R 425 RS1/16S473J

R 501 RS1/16S393J  
R 503 RS1/16S681J  
R 504 RAB4C102J  
R 505 RS1/16S102J  
R 602 RS1/16S473J

C R 603 RS1/16S473J  
R 605 RS1/16S102J  
R 607 RS1/16S474J  
R 608 RS1/16S474J  
R 609 RS1/16S474J

R 610 RS1/16S0R0J  
R 611 RS1/16S473J  
R 612 RS1/16S471J  
R 613 RS1/16S102J  
R 614 RS1/16S102J

R 615 RAB4C471J  
R 619 RS1/16S471J  
R 620 RS1/16S471J  
R 621 RS1/16S471J  
R 622 RAB4C471J

R 623 RS1/16S102J  
R 624 RS1/16S102J  
R 625 RS1/16S102J  
R 626 RAB4C471J  
R 627 RS1/16S471J

D R 628 RS1/16S474J  
R 629 RS1/16S474J  
R 631 RS1/16S473J  
R 632 RS1/16S473J  
R 633 RS1/16S103J

R 634 RS1/16S102J

**Circuit Symbol and No. Part NamePart No.**

R 635 RS1/16S274J  
R 636 RS1/16S102J  
R 637 RS1/16S274J  
R 638 RS1/16S102J

R 640 RS1/16S102J  
R 641 RAB4C102J  
R 642 RS1/16S102J  
R 643 RS1/16S102J  
R 644 RS1/16S473J

R 649 RS1/16S0R0J  
R 651 RS1/16S124J  
R 652 RS1/16S102J  
R 653 RS1/16S0R0J  
R 654 RS1/16S473J

R 655 RAB4C102J  
R 656 RS1/16S473J  
R 657 RAB4C102J  
R 659 RS1/16S471J  
R 661 RS1/16S102J

R 662 RAB4C102J  
R 663 RAB4C473J  
R 664 RS1/16S472J  
R 665 RS1/16S471J  
R 666 RS1/16S102J

R 667 RS1/16S102J  
R 668 RAB4C0R0J  
R 669 RAB4C102J  
R 680 RS1/16S473J  
R 681 RS1/16S274J

R 685 RS1/16S102J  
R 686 RS1/16S102J  
R 688 RS1/16S471J  
R 689 RS1/16S471J  
R 693 RS1/16S102J

R 701 RS1/16S0R0J  
R 702 RS1/16S0R0J  
R 703 RS1/16S0R0J  
R 704 RS1/16S0R0J  
R 705 RS1/16S102J

R 706 RS1/16S102J  
R 707 RS1/16S102J  
R 708 RS1/16S102J  
R 709 RS1/16S223J  
R 710 RS1/16S223J

R 711 RS1/16S223J  
R 712 RS1/16S223J  
R 713 RS1/16S223J  
R 714 RS1/16S223J  
R 715 RS1/16S223J

R 716 RS1/16S223J  
R 751 RS1/16S222J  
R 752 RS1/16S222J  
R 753 RS1/16S681J  
R 754 RS1/16S105J

R 755 RS1/16S821J  
R 757 RS1/16S223J  
R 758 RS1/16S222J  
R 759 RS1/16S222J  
R 761 RS1/16S681J

R 762 RS1/16S473J

**Circuit Symbol and No. Part NamePart No.**

R 763 RS1/16S681J  
 R 764 RS1/16S681J  
 R 771 RS1/16S222J  
 R 772 RS1/16S222J

R 773 RS1/16S473J  
 R 774 RS1/16S103J  
 R 775 RS1/16S103J  
 R 776 RS1/16S473J  
 R 777 RS1/16S681J

R 778 RS1/16S681J  
 R 779 RS1/16S332J  
 R 810 RS1/16S220J  
 R 811 RS1/16S103J  
 R 812 RS1/16S103J

R 813 RS1/16S822J  
 R 814 RS1/16S103J  
 R 815 RD1/4PU101J  
 R 821 RS1/16S822J  
 R 822 RS1/16S471J

R 823 RS1/16S473J  
 R 824 RS1/16S104J  
 R 825 RS1/16S473J  
 R 826 RD1/4PU101J  
 R 827 RD1/4PU102J

R 828 RS1/16S103J  
 R 829 RS1/16S471J  
 R 830 RS1/16S393J  
 R 832 RS1/16S223J  
 R 833 RS1/16S223J

R 841 RD1/4PU472J  
 R 842 RS1/16S222J  
 R 843 RS1/16S473J  
 R 844 RS1/16S333J  
 R 846 RS1/16S473J

R 847 RS1/16S103J  
 R 848 RS1/16S473J  
 R 851 RS1/16S473J  
 R 852 RS1/16S473J  
 R 853 RS1/16S473J

R 854 RS1/16S104J  
 R 855 RS1/16S473J  
 R 856 RS1/16S473J  
 R 858 RD1/4PU102J  
 R 860 RS1/16S473J

R 862 RS1/16S103J  
 R 863 RS1/8S362J  
 R 864 RD1/4PU471J  
 R 865 RS1/16S103J  
 R 866 RS1/8S362J

R 867 RS1/16S273J  
 R 868 RD1/4PU471J  
 R 871 RS1/16S102J  
 R 872 RS1/16S102J  
 R 873 RS1/16S102J

R 874 RS1/16S102J  
 R 875 RS1/16S102J  
 R 876 RS1/16S102J  
 R 883 RS1/16S473J  
 R 884 RS1/16S683J

R 885 RS1/16S473J

**Circuit Symbol and No. Part NamePart No.**

R 887 RS1/16S102J  
 R 888 RS1/16S103J  
 R 890 RS1/16S102J  
 R 901 RS1/10S470J

R 902 RS1/10SR68J  
 R 903 RN1/10SK3903D  
 R 904 RS1/10S511J  
 R 905 RS1/10S151J  
 R 906 RN1/10SE3302D

R 907 RN1/10SK4303D  
 R 908 RS1/16S681J  
 R 909 RS1/16S621J  
 R 910 RS1/16S333J  
 R 911 RS1/16S471J

R 912 RS1/16S471J  
 R 913 RS1/16S471J  
 R 914 RS1/10S122J  
 R 915 RS1/16S223J  
 R 916 RS1/16S223J

R 917 RS1/16S332J  
 R 918 RS1/16S332J  
 R 919 RS1/10S102J  
 R 920 RS1/16S222J  
 R 921 RS1/16S472J

R 922 RS1/10S471J  
 R 923 RS1/16S821J  
 R 924 RS1/16S821J  
 R 925 RS1/10S681J  
 R 926 RS1/16S511J

R 927 RS1/16S223J  
 R 928 RS1/16S511J  
 R 929 RS1/16S472J  
 R 930 RS1/16S332J  
 R 931 RS1/16S124J

R 932 RS1/16S511J  
 R 933 RS1/16S102J  
 R 934 RD1/4PU2R2J  
 R 935 RD1/4PU2R2J  
 R 936 RS1/16S222J

R 937 RS1/16S911J  
 R 938 RS1/16S511J  
 R 939 RS1/16S223J  
 R 940 RS1/16S511J  
 R 941 RS1/16S224J

R 942 RS1/16S104J  
 R 943 RS1/16S511J  
 R 944 RS1/16S822J  
 R 945 RS1/16S332J  
 R 946 RS1/16S274J

R 947 RS1/16S104J  
 R 948 RS1/16S0R0J  
 R 949 RS1/16S0R0J  
 R 950 RS1/16S911J  
 R 951 RS1/16S102J

R 952 RS1/16S153J  
 R 953 RS1/16S332J  
 R 954 RS1/16S471J  
 R 955 RS1/4SA101J  
 R 956 RS1/16S0R0J

R 957 RS1/16S222J

**Circuit Symbol and No. Part NamePart No.****Circuit Symbol and No. Part NamePart No.****CAPACITORS**

A	C 101	CKSQYB225K10	C 254		CCSRCH470J50
	C 102	CKSQYB225K10	C 255		CCSRCH470J50
	C 103	CKSQYB225K10	C 256		CCSRCH470J50
	C 104	CKSQYB225K10	C 257		CCSRCH470J50
	C 105	CKSRYB224K16	C 258		CCSRCH470J50
			C 259	10μF	CCG1138
			C 260	10μF	CCG1138
	C 106	CKSRYB224K16	C 261	10μF	CCG1138
	C 107	CKSRYB474K10	C 262	10μF	CCG1138
	C 108	CKSRYB474K10	C 263	10μF	CCG1138
	C 109	CKSRYB104K16	C 264	10μF	CCG1138
	C 110	CKSYB106K6R3	C 265		CKSRYB105K10
	C 111	CKSYB106K6R3	C 266		CKSRYB105K10
	C 112	CKSRYB105K10	C 301		CKSRYB223K50
	C 113	CKSRYB104K16	C 302		CEAL100M16
	C 114	CCSRCH101J50	C 303		CEAL220M10
	C 116	CCSRCH101J50	C 304		CKSRYB222K50
	C 117	CKSYB106K6R3	C 305		CKSRYB222K50
	C 118	CKSYB106K6R3	C 306		CCSQCH101J50
	C 120	CKSYB106K6R3	C 307		CCSRCH181J50
B	C 121	CKSRYB472K50	C 308		CCSQCH101J50
	C 122	CKSRYB472K50	C 309		CCSRCH181J50
	C 123	CCSRCH471J50	C 351		CKSRYB102K50
	C 124	CCSRCH471J50	C 352		CEJQ101M16
	C 125	CKSRYB473K50	C 353		CKSRYB104K16
	C 126	CCSRCH101J50	C 354		CEAL100M16
	C 151	CKSRYB103K50	C 355		CASA4R7M16
	C 152	CKSYB106K6R3	C 357		CKSRYB105K6R3
	C 153	CKSYB106K6R3	C 358		CKSYB106K6R3
	C 154	CKSRYB105K10	C 405		CKSRYB103K50
	C 155	CKSRYB222K50	C 406		CKSRYB183K50
	C 156	CKSRYB105K10	C 407		CKSRYB183K50
	C 201	CCSRCH101J50	C 408		CEJQ101M6R3
	C 202	CCSRCH101J50	C 409		CKSRYB103K50
	C 203	CCSRCH101J50	C 410		CEJQ101M16
	C 204	CCSRCH101J50	C 411		CKSRYB472K50
	C 207	CKSRYB102K50	C 412		CKSRYB103K50
	C 208	CKSRYB102K50	C 421		CKSRYB474K10
	C 209	CKSRYB102K50	C 501		CEAL100M16
	C 210	CKSRYB102K50	C 502		CKSRYB104K16
C	C 213	CCSRCH101J50	C 503		CKSYB106K6R3
	C 214	CCSRCH101J50	C 504		CKSRYB104K16
	C 215	CCSRCH101J50	C 505		CKSRYB105K10
	C 216	CCSRCH101J50	C 506		CKSRYB104K16
	C 219	CKSRYB102K50	C 507		CKSRYB472K50
	C 220	CKSRYB102K50	C 508		CCSRCH220J50
	C 221	CKSRYB102K50	C 509		CCSRCH220J50
	C 222	CKSRYB102K50	C 551		CKSRYB102K50
	C 231	CCSRCH101J50	C 552		CKSRYB102K50
	C 232	CCSRCH101J50	C 601		CKSRYB104K16
	C 233	CCSRCH101J50	C 602		CCSRCH180J50
	C 234	CKSRYB102K50	C 603		CKSYB106K6R3
	C 235	CKSRYB102K50	C 604		CCSRCH101J50
	C 236	CCSRCH101J50	C 605		CCSRCH180J50
	C 237	CEAT331M6R3	C 607		CCSRCH220J50
D	C 238	CEAL100M16	C 608		CCSRCH180J50
	C 239	CCSRCH101J50	C 609		CKSRYB104K16
	C 251	CCSRCH470J50	C 610		CKSRYB102K50
	C 252	CCSRCH470J50	C 611		CKSRYB103K50
	C 253	CCSRCH470J50	C 612		CKSRYB103K50

**Circuit Symbol and No. Part NamePart No.**

C 613	CKSRYB103K50
C 614	CKSRYB102K50
C 615	CKSRYB102K50
C 616	CKSRYB104K16
C 617	CKSRYB104K16
C 618	CCSRCH101J50
C 619	CKSRYB104K16
C 620	CCSRCH101J50
C 702	CKSRYB103K50
C 703	CEAL470M10
C 704	CKSYB475K10
C 705	CKSYB475K10
C 706	CKSYB475K10
C 707	CKSYB475K10
C 751	CKSRYB104K16
C 752	CKSRYB104K16
C 771	CCSRCH681J50
C 772	CCSRCH681J50
C 810	CKSRYB103K50
C 811	CCSRCH101J50
C 841	CCSRCH221J50
C 842	CKSRYB103K50
C 852	CKSRYB102K50
C 853	CCSRCH181J50
C 861	CKSRYB473K50
C 862	CKSRYB473K50
C 871	CKSRYB103K50
C 881	CKSRYB224K16
C 901	CKSRYB105K10
C 902	CASA470M20
C 903	CKSRYB102K50
C 904	CKSRYB104K25
C 905	CKSRYB104K16
C 906	CKSRYB105K10
C 907	CEHAR470M16
C 908	CEJQ470M10
C 909	CEHAT331M10
C 910	CCSRCH101J50
C 911	CKSRYB102K50
C 912	CKSQYB104K25
C 913	CEJQ470M35
C 914	CCSRCH101J50
C 915	CKSRYB104K16
C 916	CEJQ100M25
C 917	CKSRYB102K50
C 918	CEHAT331M10
C 919	CKSRYB223K50
C 920	CKSRYB104K25
C 921	CEJQ220M10
C 922	CASA330M10
C 923	CKSRYB103K50
C 924	CEJQ470M6R3
C 925	470µF/6.3V
C 926	100µF/10V
C 927	CKSRYB103K50
C 928	CKSRYB105K10
C 929	CEHAR101M10
C 930	3300µF/16V
C 931	CKSRYB103K50
C 932	CKSRYB104K25

**Circuit Symbol and No. Part NamePart No.**

C 933	CKSRYB153K50
C 934	CKSYB105K16
C 937	CEAT102M16(P35)
C 938	CKSRYB103K50
C 939	CKSRYB103K50
C 940	0.1F/5.5V
C 941	CCL1023
	CKSRYB473K50
C 942	CKSRYB104K25
C 943	CKSYB105K16
C 944	CCSRCH102J50

**A**

**Unit Number:CWM9104(AVX-MG2237ZF)**  
**Unit Name:Tuner Audio Unit**

**MISCELLANEOUS**

IC 101	IC	PML011A
IC 151	IC	TC7S66F
IC 201	IC	NJM2068MD
IC 202	IC	NJM2068MD
IC 203	IC	NJM2068MD
IC 204	IC	NJM2068MD
IC 206	IC	NJM2068MD
IC 251	IC	NJM4558V
IC 252	IC	NJM4558V
IC 301	IC	DS36277
IC 302	IC	PCA82C250T
IC 303	IC	BA05SFP
IC 501	IC	PM4006B
IC 601	IC	S-93C56BD0I-J8
IC 602	IC	PD5904D
IC 603	IC	BU2099FV
IC 604	IC	S-80942CNMC-G9C
IC 771	IC	TC7S86FU
IC 772	Photo-interrupter	GP1S94
IC 773	IC	TC7S14FU
IC 901	IC	TK11835M
IC 902	IC	BA6288FS
IC 903	IC	TK11818M
IC 904	IC	S-812C50AMC-C3E
IC 905	IC	PAJ002A
Q 151	Transistor	DTA114EK
Q 201	Transistor	2SC2712
Q 351	Transistor	2SB1185
Q 352	Transistor	IMX1
Q 401	Transistor	2SC2412K
Q 501	Transistor	DTA124EK
Q 602	Transistor	DTC124EU
Q 603	Transistor	DTA124EK
Q 604	Transistor	DTA124EK
Q 701	Transistor	2SC2412K
Q 702	Transistor	2SC2412K
Q 703	Transistor	2SC2412K
Q 704	Transistor	2SC2412K
Q 751	Transistor	IMX1
Q 752	Transistor	2SB1185
Q 753	Transistor	2SB1132

**Circuit Symbol and No. Part NamePart No.**

Q 771 Transistor 2SB1238  
 Q 772 Transistor DTC114EK  
 Q 810 Transistor 2SA1576  
 Q 811 Transistor DTC124EK

A

Q 812 Transistor 2SA1674  
 Q 821 Transistor 2SC2412K  
 Q 822 Transistor 2SA1162  
 Q 823 Transistor 2SC2412K  
 Q 841 Transistor 2SC2412K

Q 842 Transistor 2SC2412K  
 Q 851 Transistor DTA114EK  
 Q 852 Transistor 2SC2412K  
 Q 853 Transistor DTC114TK  
 Q 854 Transistor DTA114EK

Q 883 Transistor 2SC2412K  
 Q 901 Transistor 2SB1238  
 Q 902 Transistor 2SB1299  
 Q 903 Transistor IMX1  
 Q 904 Transistor IMX1

B

Q 905 Transistor 2SB1185  
 Q 907 Transistor IMX1  
 Q 908 Transistor DTA124EK  
 Q 909 Transistor 2SB1185  
 Q 910 Transistor IMX1

Q 911 Transistor 2SB1238  
 Q 912 Transistor 2SB1299  
 Q 913 Transistor 2SB1185  
 Q 914 Transistor IMX1  
 Q 916 Transistor DTA124EK

■

D 101 Diode HZU3R3(B2)  
 D 213 Diode HZS5LL(B)  
 D 301 Diode HZS20L(2)  
 D 302 Diode HZS20L(2)  
 D 303 Diode HZS20L(2)

C

D 304 Diode HZS20L(2)  
 D 351 Diode HZS9L(A1)  
 D 352 Diode MA111  
 D 701 Diode UDZ18(B)  
 D 702 Diode UDZ18(B)

D 703 Diode UDZ18(B)  
 D 704 Diode UDZ18(B)  
 D 705 Diode UDZ18(B)  
 D 706 Diode UDZ18(B)  
 D 707 Diode UDZ18(B)

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D 708 Diode UDZ18(B)  
 D 751 Diode HZS6L(B2)  
 D 752 Diode MA153  
 D 753 Diode MA153  
 D 754 Diode MA153

D

D 755 Diode MA153  
 D 756 Diode MA153  
 D 757 Diode MA153  
 D 758 Diode MA153  
 D 759 Diode UDZ10(B)

D 760 Diode MA153  
 D 761 Diode MA153  
 D 762 Diode MA153  
 D 763 Diode MA153  
 D 810 Diode 1SS133

D 811 Diode 1SS133

**Circuit Symbol and No. Part NamePart No.**

D 821 Diode HZS5LL(C)  
 D 822 Diode 1SS133  
 D 823 Diode HZS7L(B2)  
 D 841 Diode HZS6L(B2)

D 842 Diode MA152WK  
 D 843 Diode MA111  
 D 851 Diode HZS12L(C1)  
 D 861 Diode 1SS133  
 D 862 Diode 1SS133

D 863 Diode 1SS133  
 D 864 Diode 1SS133  
 D 871 Diode 1SS133  
 D 872 Diode 1SS133  
 D 883 Diode HZS7L(B2)

D 901 Diode HZU7R5(B3)  
 D 902 Diode RB500V-40  
 D 903 Diode HZS5LL(A)  
 D 904 Diode HZS18L(3)  
 D 905 Diode MA728

D 906 Diode HZU8R2(B1)  
 D 907 Diode MA728  
 D 908 Diode UDZ8R2(B)  
 D 909 Diode RM4Z-LFJ1  
 D 921 Diode ERA15-02VH

D 922 Diode 1SS133  
 D 923 Diode 1SS133  
 L 101 Inductor CTF1379  
 L 351 Inductor LCTA2R2J2520  
 L 403 Inductor LAU1R0K

L 404 Inductor LAU1R0K  
 L 501 Inductor LAU2R2K  
 L 502 Inductor LAU2R2K  
 L 551 Inductor LAU1R0K  
 L 552 Inductor LAU1R0K

L 601 Chip-Inductor LCTA2R2J3225  
 L 602 Inductor LCTA2R2J2520  
 L 603 Inductor CTF1379  
 L 604 Inductor CTF1379  
 L 605 Inductor CTF1306

L 606 Inductor CTF1306  
 L 701 Inductor CTF1379  
 L 751 Inductor LAU2R2K  
 L 901 Inductor CTF1499  
 L 902 Choke Coil 100μH CTH1196

L 903 Transformer CTX1088  
 L 905 Choke Coil 1.4mH CTH1129  
 TH901 Thermistor CCX1051  
 X 501 Crystal Resonator 4.332MHz CSS1056  
 X 601 Radiator 16MHz CSS1571

X 602 Radiator 32.768kHz CSS1319  
 S 751 Spring Switch(OPEN) CSN1046  
 S 752 Spring Switch(CLOSE) CSN1046  
 FU901 Fuse 2A CEK1176  
 FU902 Fuse 1.75A CEK1177

FB902 Inductor CTF1449  
 FB901 Inductor CTF1449

**RESISTORS**

R 102 RS1/16S102J  
 R 103 RS1/16S103J



**Circuit Symbol and No. Part NamePart No.**

R 104	RS1/16S682J
R 106	RS1/16S102J
R 108	RS1/16S101J
R 151	RS1/16S104J
R 152	RS1/16S473J
R 153	RS1/16S473J
R 154	RS1/16S473J
R 155	RS1/16S473J
R 156	RS1/16S104J
R 157	RS1/16S104J
R 158	RS1/16S272J
R 159	RS1/16S272J
R 160	RS1/16S563J
R 161	RS1/16S563J
R 162	RS1/16S472J
R 163	RS1/16S472J
R 164	RS1/16S391J
R 165	RS1/16S912J
R 201	RS1/16S472J
R 202	RS1/16S472J
R 203	RS1/16S472J
R 204	RS1/16S472J
R 205	RS1/16S470J
R 206	RS1/16S470J
R 207	RS1/16S472J
R 208	RS1/16S472J
R 209	RS1/16S470J
R 210	RS1/16S470J
R 211	RS1/16S472J
R 212	RS1/16S472J
R 213	RS1/16S470J
R 214	RS1/16S470J
R 215	RS1/16S472J
R 216	RS1/16S472J
R 217	RS1/16S472J
R 218	RS1/16S472J
R 219	RS1/16S470J
R 220	RS1/16S470J
R 226	RS1/16S472J
R 227	RS1/16S470J
R 228	RS1/16S472J
R 229	RS1/16S472J
R 230	RS1/16S470J
R 231	RS1/16S102J
R 232	RS1/16S272J
R 233	RS1/16S473J
R 234	RS1/16S473J
R 236	RS1/16S473J
R 237	RS1/16S472J
R 238	RS1/16S472J
R 240	RS1/16S472J
R 251	RS1/16S333J
R 252	RS1/16S333J
R 253	RS1/16S333J
R 254	RS1/16S333J
R 255	RS1/16S333J
R 256	RS1/16S333J
R 257	RS1/16S333J
R 258	RS1/16S333J
R 259	RS1/16S753J

**Circuit Symbol and No. Part NamePart No.**

R 260	RS1/16S753J
R 261	RS1/16S753J
R 262	RS1/16S753J
R 263	RS1/16S753J
R 264	RS1/16S753J
R 265	RS1/16S753J
R 266	RS1/16S753J
R 301	RS1/16S223J
R 302	RS1/16S472J
R 303	RS1/16S472J
R 304	RS1/16S273J
R 305	RS1/16S472J
R 306	RD1/4PU470J
R 307	RD1/4PU470J
R 308	RS1/16S102J
R 351	RS1/16S223J
R 352	RS1/16S223J
R 353	RS1/16S223J
R 354	RS1/16S332J
R 355	RS1/16S121J
R 356	RS1/16S121J
R 357	RS1/16S221J
R 358	RS1/16S221J
R 359	RS1/16S222J
R 404	RS1/16S473J
R 405	RS1/16S681J
R 406	RS1/16S103J
R 407	RS1/16S681J
R 408	RS1/16S681J
R 409	RS1/16S681J
R 410	RS1/16S473J
R 411	RS1/16S681J
R 412	RS1/16S681J
R 413	RS1/16S272J
R 414	RS1/16S272J
R 415	RS1/16S393J
R 416	RS1/16S162J
R 417	RS1/16S162J
R 418	RS1/16S472J
R 419	RS1/16S473J
R 420	RS1/16S473J
R 424	RS1/16S222J
R 425	RS1/16S473J
R 501	RS1/16S393J
R 503	RS1/16S681J
R 504	RAB4C102J
R 505	RS1/16S102J
R 602	RS1/16S473J
R 603	RS1/16S473J
R 605	RS1/16S102J
R 607	RS1/16S474J
R 608	RS1/16S474J
R 609	RS1/16S474J
R 610	RS1/16S0R0J
R 611	RS1/16S473J
R 612	RS1/16S471J
R 613	RS1/16S102J
R 614	RS1/16S102J
R 615	RAB4C471J
R 619	RS1/16S471J

A

B

C

D

**Circuit Symbol and No. Part NamePart No.**

R 620	RS1/16S471J
R 621	RS1/16S471J
R 622	RAB4C471J
R 623	RS1/16S102J
R 624	RS1/16S102J
R 625	RS1/16S102J
R 626	RAB4C471J
R 627	RS1/16S471J
R 628	RS1/16S474J
R 629	RS1/16S474J
R 630	RS1/16S124J
R 631	RS1/16S274J
R 632	RS1/16S473J
R 633	RS1/16S103J
R 634	RS1/16S102J
R 635	RS1/16S274J
R 636	RS1/16S102J
R 637	RS1/16S274J
R 638	RS1/16S102J
R 640	RS1/16S102J
R 641	RAB4C102J
R 642	RS1/16S102J
R 643	RS1/16S102J
R 644	RS1/16S473J
R 649	RS1/16S0R0J
R 651	RS1/16S124J
R 652	RS1/16S102J
R 653	RS1/16S0R0J
R 654	RS1/16S473J
R 655	RAB4C102J
R 656	RS1/16S473J
R 657	RAB4C102J
R 659	RS1/16S471J
R 661	RS1/16S102J
R 662	RAB4C102J
R 663	RAB4C473J
R 664	RS1/16S472J
R 665	RS1/16S471J
R 666	RS1/16S102J
R 667	RS1/16S102J
R 668	RAB4C0R0J
R 669	RAB4C102J
R 680	RS1/16S473J
R 681	RS1/16S274J
R 685	RS1/16S102J
R 686	RS1/16S102J
R 688	RS1/16S471J
R 689	RS1/16S471J
R 693	RS1/16S102J
R 701	RS1/16S0R0J
R 702	RS1/16S0R0J
R 703	RS1/16S0R0J
R 704	RS1/16S0R0J
R 705	RS1/16S102J
R 706	RS1/16S102J
R 707	RS1/16S102J
R 708	RS1/16S102J
R 709	RS1/16S223J
R 710	RS1/16S223J
R 711	RS1/16S223J

**Circuit Symbol and No. Part NamePart No.**

R 712	RS1/16S223J
R 713	RS1/16S223J
R 714	RS1/16S223J
R 715	RS1/16S223J
R 716	RS1/16S223J
R 751	RS1/16S152J
R 752	RS1/16S222J
R 753	RS1/16S681J
R 754	RS1/16S105J
R 757	RS1/16S223J
R 758	RS1/16S222J
R 759	RS1/16S222J
R 761	RS1/16S681J
R 762	RS1/16S473J
R 763	RS1/16S681J
R 764	RS1/16S681J
R 771	RS1/16S222J
R 772	RS1/16S222J
R 773	RS1/16S473J
R 774	RS1/16S103J
R 775	RS1/16S103J
R 776	RS1/16S473J
R 777	RS1/16S681J
R 778	RS1/16S681J
R 779	RS1/16S332J
R 810	RS1/16S220J
R 811	RS1/16S103J
R 812	RS1/16S103J
R 813	RS1/16S822J
R 814	RS1/16S103J
R 815	RD1/4PU101J
R 821	RS1/16S822J
R 822	RS1/16S471J
R 823	RS1/16S473J
R 824	RS1/16S683J
R 825	RS1/16S473J
R 826	RD1/4PU101J
R 827	RD1/4PU102J
R 828	RS1/16S103J
R 829	RS1/16S471J
R 830	RS1/16S272J
R 832	RS1/16S223J
R 833	RS1/16S223J
R 841	RD1/4PU472J
R 842	RS1/16S222J
R 843	RS1/16S473J
R 844	RS1/16S333J
R 846	RS1/16S473J
R 847	RS1/16S103J
R 848	RS1/16S473J
R 851	RS1/16S473J
R 852	RS1/16S473J
R 853	RS1/16S682J
R 854	RS1/16S104J
R 855	RS1/16S473J
R 856	RS1/16S473J
R 858	RD1/4PU102J
R 860	RS1/16S473J
R 861	RS1/16S103J
R 862	RS1/16S103J

**Circuit Symbol and No. Part NamePart No.**

R 863	RS1/8S362J
R 864	RD1/4PU471J
R 865	RS1/16S103J
R 866	RS1/8S362J
R 867	RS1/16S273J
R 868	RD1/4PU471J
R 871	RS1/16S102J
R 872	RS1/16S102J
R 873	RS1/16S102J
R 874	RS1/16S102J
R 875	RS1/16S102J
R 876	RS1/16S102J
R 883	RS1/16S473J
R 884	RS1/16S683J
R 885	RS1/16S473J
R 887	RS1/16S102J
R 888	RS1/16S103J
R 890	RS1/16S102J
R 901	RS1/10S470J
R 902	RS1/10SR68J
R 903	RN1/10SK3903D
R 904	RS1/10S511J
R 905	RS1/10S151J
R 906	RN1/10SE3302D
R 907	RN1/10SK4303D
R 908	RS1/16S681J
R 909	RS1/16S621J
R 910	RS1/16S333J
R 911	RS1/16S471J
R 912	RS1/16S471J
R 913	RS1/16S471J
R 914	RS1/10S122J
R 915	RS1/16S223J
R 916	RS1/16S223J
R 917	RS1/16S332J
R 918	RS1/16S332J
R 919	RS1/10S102J
R 920	RS1/16S222J
R 921	RS1/16S472J
R 922	RS1/10S471J
R 923	RS1/16S821J
R 924	RS1/16S821J
R 925	RS1/10S681J
R 926	RS1/16S511J
R 927	RS1/16S223J
R 928	RS1/16S511J
R 929	RS1/16S472J
R 930	RS1/16S332J
R 931	RS1/16S124J
R 932	RS1/16S511J
R 933	RS1/16S102J
R 934	RD1/4PU2R2J
R 935	RD1/4PU2R2J
R 936	RS1/16S222J
R 937	RS1/16S911J
R 938	RS1/16S511J
R 939	RS1/16S223J
R 940	RS1/16S511J
R 941	RS1/16S224J
R 942	RS1/16S104J

**Circuit Symbol and No. Part NamePart No.**

R 943	RS1/16S511J
R 944	RS1/16S822J
R 945	RS1/16S332J
R 946	RS1/16S274J
R 947	RS1/16S104J
R 948	RS1/16S0R0J
R 949	RS1/16S0R0J
R 950	RS1/16S911J
R 951	RS1/16S102J
R 952	RS1/16S153J
R 953	RS1/16S332J
R 954	RS1/16S471J
R 955	RS1/4SA101J
R 956	RS1/16S0R0J
R 957	RS1/16S222J
<b>CAPACITORS</b>	
C 101	CKSQYB225K10
C 102	CKSQYB225K10
C 103	CKSQYB225K10
C 104	CKSQYB225K10
C 105	CKSRYB224K16
C 106	CKSRYB224K16
C 107	CKSRYB474K10
C 108	CKSRYB474K10
C 109	CKSRYB104K16
C 110	CKSYB106K6R3
C 111	CKSYB106K6R3
C 112	CKSRYB105K10
C 113	CKSRYB104K16
C 114	CCSRCH101J50
C 116	CCSRCH101J50
C 117	CKSYB106K6R3
C 118	CKSYB106K6R3
C 120	CKSYB106K6R3
C 121	CKSRYB472K50
C 122	CKSRYB472K50
C 123	CCSRCH471J50
C 124	CCSRCH471J50
C 125	CKSRYB473K50
C 126	CCSRCH101J50
C 151	CKSRYB103K50
C 152	CKSYB106K6R3
C 153	CKSYB106K6R3
C 154	CKSRYB105K10
C 155	CKSRYB222K50
C 156	CKSRYB105K10
C 201	CCSRCH101J50
C 202	CCSRCH101J50
C 203	CCSRCH101J50
C 204	CCSRCH101J50
C 207	CKSRYB102K50
C 208	CKSRYB102K50
C 209	CKSRYB102K50
C 210	CKSRYB102K50
C 213	CCSRCH101J50
C 214	CCSRCH101J50
C 215	CCSRCH101J50
C 216	CCSRCH101J50
C 219	CKSRYB102K50

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**Circuit Symbol and No. Part NamePart No.**

C 220 CKSRYB102K50  
C 221 CKSRYB102K50

C 222 CKSRYB102K50  
C 231 CCSRCH101J50  
C 232 CCSRCH101J50  
A C 233 CCSRCH101J50  
C 234 CKSRYB102K50

C 235 CKSRYB102K50  
C 236 CCSRCH101J50  
C 237 CEAT331M6R3  
C 238 CEAL100M16  
C 239 CCSRCH101J50

C 251 CCSRCH470J50  
C 252 CCSRCH470J50  
C 253 CCSRCH470J50  
C 254 CCSRCH470J50  
C 255 CCSRCH470J50

C 256 CCSRCH470J50  
C 257 CCSRCH470J50  
C 258 CCSRCH470J50  
C 259 10μF CCG1138  
B C 260 10μF CCG1138

C 261 10μF CCG1138  
C 262 10μF CCG1138  
C 263 10μF CCG1138  
C 264 10μF CCG1138  
C 265 CKSRYB105K10

C 266 CKSRYB105K10  
C 301 CKSRYB223K50  
C 302 CEAL100M16  
C 303 CEAL220M10  
C 304 CKSRYB222K50

C 305 CKSRYB222K50  
C 306 CCSQCH101J50  
C 307 CCSRCH181J50  
C 308 CCSQCH101J50  
C 309 CCSRCH181J50

C 351 CKSRYB102K50  
C 352 CEJQ101M16  
C 353 CKSRYB104K16  
C 354 CEAL100M16  
C 355 CASA4R7M16

C 357 CKSRYB105K6R3  
C 358 CKSYB106K6R3  
C 405 CKSRYB103K50  
C 406 CKSRYB183K50  
C 407 CKSRYB183K50

C 408 CEJQ101M6R3  
C 409 CKSRYB103K50  
C 410 CEJQ101M16  
C 411 CKSRYB472K50  
C 412 CKSRYB103K50

C 421 CKSRYB683K16  
D C 501 CEAL100M16  
C 502 CKSRYB104K16  
C 503 CKSYB106K6R3  
C 504 CKSRYB104K16

C 505 CKSRYB105K10  
C 506 CKSRYB104K16  
C 507 CKSRYB472K50

**Circuit Symbol and No. Part NamePart No.**

C 508 CCSRCH220J50  
C 509 CCSRCH220J50

C 551 CKSRYB102K50  
C 552 CKSRYB102K50  
C 601 CKSRYB104K16  
C 602 CCSRCH180J50  
C 603 CKSYB106K6R3

C 604 CCSRCH101J50  
C 605 CCSRCH180J50  
C 607 CCSRCH220J50  
C 608 CCSRCH180J50  
C 609 CKSRYB104K16

C 610 CKSRYB102K50  
C 611 CKSRYB103K50  
C 612 CKSRYB103K50  
C 613 CKSRYB103K50  
C 614 CKSRYB102K50

C 615 CKSRYB102K50  
C 616 CKSRYB104K16  
C 617 CKSRYB104K16  
C 618 CCSRCH101J50  
C 619 CKSRYB104K16

C 620 CCSRCH101J50  
C 702 CKSRYB103K50  
C 703 CEAL470M10  
C 704 CKSYB475K10  
C 705 CKSYB475K10

C 706 CKSYB475K10  
C 707 CKSYB475K10  
C 751 CKSRYB104K16  
C 752 CKSRYB104K16  
C 771 CCSRCH681J50

C 772 CCSRCH681J50  
C 810 CKSRYB103K50  
C 811 CCSRCH101J50  
C 841 CCSRCH221J50  
C 842 CKSRYB103K50

C 852 CKSRYB102K50  
C 853 CCSRCH181J50  
C 861 CKSRYB473K50  
C 862 CKSRYB473K50  
C 871 CKSRYB103K50

C 881 CKSRYB224K16  
C 901 CKSRYB105K10  
C 902 CASA470M20  
C 903 CKSRYB102K50  
C 904 CKSRYB104K25

C 905 CKSRYB104K16  
C 906 CKSRYB105K10  
C 907 CEHAR470M16  
C 908 CEJQ470M10  
C 909 CEHAT331M10

C 910 CCSRCH101J50  
C 911 CKSRYB102K50  
C 912 CKSQYB104K25  
C 913 CEJQ4R7M35  
C 914 CCSRCH101J50

C 915 CKSRYB104K16  
C 916 CEJQ100M25  
C 917 CKSRYB102K50

**Circuit Symbol and No. Part NamePart No.**

C 918		CEHAT331M10
C 919		CKSRYB223K50
C 920		CKSRYB104K25
C 921		CEJQ220M10
C 922		CASA330M10
C 923		CKSRYB103K50
C 924		CEJQ470M6R3
C 925	470µF/6.3V	CCH1182
C 926	100µF/10V	CCH1323
C 927		CKSRYB103K50
C 928		CKSRYB105K10
C 929		CEHAR101M10
C 930	3300µF/16V	CCH1163(P35)
C 931		CKSRYB103K50
C 932		CKSRYB104K25
C 933		CKSRYB153K50
C 934		CKSYB105K16
C 937		CEAT102M16(P35)
C 938		CKSRYB103K50
C 939		CKSRYB103K50
C 940	0.1F/5.5V	CCL1023
C 941		CKSRYB473K50
C 942		CKSRYB104K25
C 943		CKSYB105K16
C 944		CCSRCH102J50

**A****Unit Number:CWM9105(AVX-MG2337ZF)****Unit Name:Tuner Audio Unit****MISCELLANEOUS**

IC 101	IC	PML011A
IC 151	IC	TC7S66F
IC 201	IC	NJM2068MD
IC 202	IC	NJM2068MD
IC 203	IC	NJM2068MD
IC 204	IC	NJM2068MD
IC 206	IC	NJM2068MD
IC 251	IC	NJM4558V
IC 252	IC	NJM4558V
IC 301	IC	DS36277
IC 302	IC	PCA82C250T
IC 303	IC	BA05SFP
IC 501	IC	PM4006B
IC 601	IC	S-93C56BD0I-J8
IC 602	IC	PD5904D
IC 603	IC	BU2099FV
IC 604	IC	S-80942CNMC-G9C
IC 771	IC	TC7S86FU
IC 772	Photo-interrupter	GP1S94
IC 773	IC	TC7S14FU
IC 901	IC	TK11835M
IC 902	IC	BA6288FS
IC 903	IC	TK11818M
IC 904	IC	S-812C50AMC-C3E
IC 905	IC	PAJ002A
Q 151	Transistor	DTA114EK

**Circuit Symbol and No. Part NamePart No.**

Q 201	Transistor	2SC2712
Q 351	Transistor	2SB1185
Q 352	Transistor	IMX1
Q 401	Transistor	2SC2412K
Q 501	Transistor	DTA124EK
Q 602	Transistor	DTC124EU
Q 603	Transistor	DTA124EK
Q 604	Transistor	DTA124EK
Q 701	Transistor	2SC2412K
Q 702	Transistor	2SC2412K
Q 703	Transistor	2SC2412K
Q 704	Transistor	2SC2412K
Q 751	Transistor	IMX1
Q 752	Transistor	2SB1185
Q 753	Transistor	2SB1132
Q 771	Transistor	2SB1238
Q 772	Transistor	DTC114EK
Q 810	Transistor	2SA1576
Q 811	Transistor	DTC124EK
Q 812	Transistor	2SA1674
Q 821	Transistor	2SC2412K
Q 822	Transistor	2SA1162
Q 823	Transistor	2SC2412K
Q 841	Transistor	2SC2412K
Q 842	Transistor	2SC2412K
Q 851	Transistor	DTA114EK
Q 852	Transistor	2SC2412K
Q 853	Transistor	DTC114TK
Q 854	Transistor	DTA114EK
Q 883	Transistor	2SC2412K
Q 901	Transistor	2SB1238
Q 902	Transistor	2SB1299
Q 903	Transistor	IMX1
Q 904	Transistor	IMX1
Q 905	Transistor	2SB1185
Q 907	Transistor	IMX1
Q 908	Transistor	DTA124EK
Q 909	Transistor	2SB1185
Q 910	Transistor	IMX1
Q 911	Transistor	2SB1238
Q 912	Transistor	2SB1299
Q 913	Transistor	2SB1185
Q 914	Transistor	IMX1
Q 916	Transistor	DTA124EK
D 101	Diode	HZU3R3(B2)
D 213	Diode	HZS5LL(B)
D 301	Diode	HZS20L(2)
D 302	Diode	HZS20L(2)
D 303	Diode	HZS20L(2)
D 304	Diode	HZS20L(2)
D 351	Diode	HZS9L(A1)
D 352	Diode	MA111
D 701	Diode	UDZ18(B)
D 702	Diode	UDZ18(B)
D 703	Diode	UDZ18(B)
D 704	Diode	UDZ18(B)
D 705	Diode	UDZ18(B)
D 706	Diode	UDZ18(B)
D 707	Diode	UDZ18(B)
D 708	Diode	UDZ18(B)

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**Circuit Symbol and No. Part NamePart No.**

D 751 Diode HZS6L(B2)  
D 752 Diode MA153  
D 753 Diode MA153  
D 754 Diode MA153

A D 755 Diode MA153  
D 756 Diode MA153  
D 757 Diode MA153  
D 758 Diode MA153  
D 759 Diode UDZ10(B)

D 760 Diode MA153  
D 761 Diode MA153  
D 762 Diode MA153  
D 763 Diode MA153  
D 810 Diode 1SS133

D 811 Diode 1SS133  
D 821 Diode HZS5LL(C)  
D 822 Diode 1SS133  
D 823 Diode HZS7L(B2)  
D 841 Diode HZS6L(B2)

B D 842 Diode MA152WK  
D 843 Diode MA111  
D 851 Diode HZS12L(C1)  
D 861 Diode 1SS133  
D 862 Diode 1SS133

D 863 Diode 1SS133  
D 864 Diode 1SS133  
D 871 Diode 1SS133  
D 872 Diode 1SS133  
D 883 Diode HZS7L(B2)

D 901 Diode HZU7R5(B3)  
D 902 Diode RB500V-40  
D 903 Diode HZS5LL(A)  
D 904 Diode HZS18L(3)  
D 905 Diode MA728

C D 906 Diode HZU8R2(B1)  
D 907 Diode MA728  
D 908 Diode UDZ8R2(B)  
D 909 Diode RM4Z-LFJ1  
D 921 Diode ERA15-02VH

D 922 Diode 1SS133  
D 923 Diode 1SS133  
L 101 Inductor CTF1379  
L 351 Inductor LCTA2R2J2520  
L 403 Inductor LAU1R0K

L 404 Inductor LAU1R0K  
L 501 Inductor LAU2R2K  
L 502 Inductor LAU2R2K  
L 551 Inductor LAU1R0K  
L 552 Inductor LAU1R0K

L 601 Chip-Inductor LCTA2R2J3225  
L 602 Inductor LCTA2R2J2520  
L 603 Inductor CTF1379  
L 604 Inductor CTF1379  
L 605 Inductor CTF1306

D L 606 Inductor CTF1306  
L 701 Inductor CTF1379  
L 751 Inductor LAU2R2K  
L 901 Inductor CTF1499  
L 902 Choke Coil 100μH CTH1196

L 903 Transformer CTX1088

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**Circuit Symbol and No. Part NamePart No.**

L 905 Choke Coil 1.4mH CTH1129  
TH901 Thermistor CCX1051  
X 501 Crystal Resonator 4.332MHz CSS1056  
X 601 Radiator 16MHz CSS1571

X 602 Radiator 32.768kHz CSS1319  
S 751 Spring Switch(OPEN) CSN1046  
S 752 Spring Switch(CLOSE) CSN1046  
FU901 Fuse 2A CEK1176  
FU902 Fuse 1.75A CEK1177

FB902 Inductor CTF1449  
FB901 Inductor CTF1449

**RESISTORS**

R 102 RS1/16S102J  
R 103 RS1/16S103J  
R 104 RS1/16S682J  
R 106 RS1/16S102J  
R 108 RS1/16S101J

R 151 RS1/16S104J  
R 152 RS1/16S473J  
R 153 RS1/16S473J  
R 154 RS1/16S473J  
R 155 RS1/16S473J

R 156 RS1/16S104J  
R 157 RS1/16S104J  
R 158 RS1/16S272J  
R 159 RS1/16S272J  
R 160 RS1/16S563J

R 161 RS1/16S563J  
R 162 RS1/16S472J  
R 163 RS1/16S472J  
R 164 RS1/16S391J  
R 165 RS1/16S912J

R 201 RS1/16S472J  
R 202 RS1/16S472J  
R 203 RS1/16S472J  
R 204 RS1/16S472J  
R 205 RS1/16S470J

R 206 RS1/16S470J  
R 207 RS1/16S472J  
R 208 RS1/16S472J  
R 209 RS1/16S470J  
R 210 RS1/16S470J

R 211 RS1/16S472J  
R 212 RS1/16S472J  
R 213 RS1/16S470J  
R 214 RS1/16S470J  
R 215 RS1/16S472J

R 216 RS1/16S472J  
R 217 RS1/16S472J  
R 218 RS1/16S472J  
R 219 RS1/16S470J  
R 220 RS1/16S470J

R 226 RS1/16S472J  
R 227 RS1/16S470J  
R 228 RS1/16S472J  
R 229 RS1/16S472J  
R 230 RS1/16S470J

R 231 RS1/16S102J  
R 232 RS1/16S272J

AVX-MG2037ZF/XN/UC

**Circuit Symbol and No. Part NamePart No.**

R 233	RS1/16S473J
R 234	RS1/16S473J
R 236	RS1/16S473J
R 237	RS1/16S472J
R 238	RS1/16S472J
R 240	RS1/16S472J
R 251	RS1/16S333J
R 252	RS1/16S333J
R 253	RS1/16S333J
R 254	RS1/16S333J
R 255	RS1/16S333J
R 256	RS1/16S333J
R 257	RS1/16S333J
R 258	RS1/16S333J
R 259	RS1/16S753J
R 260	RS1/16S753J
R 261	RS1/16S753J
R 262	RS1/16S753J
R 263	RS1/16S753J
R 264	RS1/16S753J
R 265	RS1/16S753J
R 266	RS1/16S753J
R 301	RS1/16S223J
R 302	RS1/16S472J
R 303	RS1/16S472J
R 304	RS1/16S273J
R 305	RS1/16S472J
R 306	RD1/4PU470J
R 307	RD1/4PU470J
R 308	RS1/16S102J
R 351	RS1/16S223J
R 352	RS1/16S223J
R 353	RS1/16S223J
R 354	RS1/16S332J
R 355	RS1/16S121J
R 356	RS1/16S121J
R 357	RS1/16S221J
R 358	RS1/16S221J
R 359	RS1/16S222J
R 404	RS1/16S473J
R 405	RS1/16S681J
R 406	RS1/16S103J
R 407	RS1/16S681J
R 408	RS1/16S681J
R 409	RS1/16S681J
R 410	RS1/16S473J
R 411	RS1/16S681J
R 412	RS1/16S681J
R 413	RS1/16S272J
R 414	RS1/16S272J
R 415	RS1/16S393J
R 416	RS1/16S162J
R 417	RS1/16S162J
R 418	RS1/16S472J
R 419	RS1/16S473J
R 420	RS1/16S473J
R 424	RS1/16S222J
R 425	RS1/16S473J
R 501	RS1/16S393J
R 503	RS1/16S681J

**Circuit Symbol and No. Part NamePart No.**

R 504	RAB4C102J
R 505	RS1/16S102J
R 602	RS1/16S473J
R 603	RS1/16S473J
R 605	RS1/16S102J
R 607	RS1/16S474J
R 608	RS1/16S474J
R 609	RS1/16S474J
R 610	RS1/16S0R0J
R 611	RS1/16S473J
R 612	RS1/16S471J
R 613	RS1/16S102J
R 614	RS1/16S102J
R 615	RAB4C471J
R 619	RS1/16S471J
R 620	RS1/16S471J
R 621	RS1/16S471J
R 622	RAB4C471J
R 623	RS1/16S102J
R 624	RS1/16S102J
R 625	RS1/16S102J
R 626	RAB4C471J
R 627	RS1/16S471J
R 628	RS1/16S474J
R 629	RS1/16S474J
R 630	RS1/16S473J
R 632	RS1/16S473J
R 633	RS1/16S103J
R 634	RS1/16S102J
R 635	RS1/16S274J
R 636	RS1/16S102J
R 637	RS1/16S274J
R 638	RS1/16S102J
R 640	RS1/16S102J
R 641	RAB4C102J
R 642	RS1/16S102J
R 643	RS1/16S102J
R 644	RS1/16S473J
R 649	RS1/16S0R0J
R 651	RS1/16S124J
R 652	RS1/16S102J
R 653	RS1/16S0R0J
R 654	RS1/16S473J
R 655	RAB4C102J
R 656	RS1/16S473J
R 657	RAB4C102J
R 659	RS1/16S471J
R 661	RS1/16S102J
R 662	RAB4C102J
R 663	RAB4C473J
R 664	RS1/16S472J
R 665	RS1/16S471J
R 666	RS1/16S102J
R 667	RS1/16S102J
R 668	RAB4C0R0J
R 669	RAB4C102J
R 680	RS1/16S473J
R 681	RS1/16S274J
R 685	RS1/16S102J
R 686	RS1/16S102J

A

B

C

D

**Circuit Symbol and No. Part NamePart No.**

R 688 RS1/16S471J  
 R 689 RS1/16S471J  
 R 693 RS1/16S102J

A

R 701 RS1/16S0R0J  
 R 702 RS1/16S0R0J  
 R 703 RS1/16S0R0J  
 R 704 RS1/16S0R0J  
 R 705 RS1/16S102J

R 706 RS1/16S102J  
 R 707 RS1/16S102J  
 R 708 RS1/16S102J  
 R 709 RS1/16S223J  
 R 710 RS1/16S223J

■

R 711 RS1/16S223J  
 R 712 RS1/16S223J  
 R 713 RS1/16S223J  
 R 714 RS1/16S223J  
 R 715 RS1/16S223J

B

R 716 RS1/16S223J  
 R 751 RS1/16S152J  
 R 752 RS1/16S222J  
 R 753 RS1/16S681J  
 R 754 RS1/16S105J

R 757 RS1/16S223J  
 R 758 RS1/16S222J  
 R 759 RS1/16S222J  
 R 761 RS1/16S681J  
 R 762 RS1/16S473J

■

R 763 RS1/16S681J  
 R 764 RS1/16S681J  
 R 771 RS1/16S222J  
 R 772 RS1/16S222J  
 R 773 RS1/16S473J

C

R 774 RS1/16S103J  
 R 775 RS1/16S103J  
 R 776 RS1/16S473J  
 R 777 RS1/16S681J  
 R 778 RS1/16S681J

R 779 RS1/16S332J  
 R 810 RS1/16S220J  
 R 811 RS1/16S103J  
 R 812 RS1/16S103J  
 R 813 RS1/16S822J

■

R 814 RS1/16S103J  
 R 815 RD1/4PU101J  
 R 821 RS1/16S822J  
 R 822 RS1/16S471J  
 R 823 RS1/16S473J

R 824 RS1/16S104J  
 R 825 RS1/16S473J  
 R 826 RD1/4PU101J  
 R 827 RD1/4PU102J  
 R 828 RS1/16S103J

D

R 829 RS1/16S471J  
 R 830 RS1/16S393J  
 R 832 RS1/16S223J  
 R 833 RS1/16S223J  
 R 841 RD1/4PU472J

R 842 RS1/16S222J  
 R 843 RS1/16S473J

**Circuit Symbol and No. Part NamePart No.**

R 844 RS1/16S333J  
 R 846 RS1/16S473J  
 R 847 RS1/16S103J

R 848 RS1/16S473J  
 R 851 RS1/16S473J  
 R 852 RS1/16S473J  
 R 853 RS1/16S682J  
 R 854 RS1/16S104J

R 855 RS1/16S473J  
 R 856 RS1/16S473J  
 R 858 RD1/4PU102J  
 R 860 RS1/16S473J  
 R 861 RS1/16S103J

R 862 RS1/16S103J  
 R 863 RS1/8S362J  
 R 864 RD1/4PU471J  
 R 865 RS1/16S103J  
 R 866 RS1/8S362J

R 867 RS1/16S273J  
 R 868 RD1/4PU471J  
 R 871 RS1/16S102J  
 R 872 RS1/16S102J  
 R 873 RS1/16S102J

R 874 RS1/16S102J  
 R 875 RS1/16S102J  
 R 876 RS1/16S102J  
 R 883 RS1/16S473J  
 R 884 RS1/16S683J

R 885 RS1/16S473J  
 R 887 RS1/16S102J  
 R 888 RS1/16S103J  
 R 890 RS1/16S102J  
 R 901 RS1/10S470J

R 902 RS1/10SR68J  
 R 903 RN1/10SK3903D  
 R 904 RS1/10S511J  
 R 905 RS1/10S151J  
 R 906 RN1/10SE3302D

R 907 RN1/10SK4303D  
 R 908 RS1/16S681J  
 R 909 RS1/16S621J  
 R 910 RS1/16S333J  
 R 911 RS1/16S471J

R 912 RS1/16S471J  
 R 913 RS1/16S471J  
 R 914 RS1/10S122J  
 R 915 RS1/16S223J  
 R 916 RS1/16S223J

R 917 RS1/16S332J  
 R 918 RS1/16S332J  
 R 919 RS1/10S102J  
 R 920 RS1/16S222J  
 R 921 RS1/16S472J

R 922 RS1/10S471J  
 R 923 RS1/16S821J  
 R 924 RS1/16S821J  
 R 925 RS1/10S681J  
 R 926 RS1/16S511J

R 927 RS1/16S223J  
 R 928 RS1/16S511J



**Circuit Symbol and No. Part NamePart No.**

R 929	RS1/16S472J
R 930	RS1/16S332J
R 931	RS1/16S124J
R 932	RS1/16S511J
R 933	RS1/16S102J
R 934	RD1/4PU2R2J
R 935	RD1/4PU2R2J
R 936	RS1/16S222J
R 937	RS1/16S911J
R 938	RS1/16S511J
R 939	RS1/16S223J
R 940	RS1/16S511J
R 941	RS1/16S224J
R 942	RS1/16S104J
R 943	RS1/16S511J
R 944	RS1/16S822J
R 945	RS1/16S332J
R 946	RS1/16S274J
R 947	RS1/16S104J
R 948	RS1/16S0R0J
R 949	RS1/16S0R0J
R 950	RS1/16S911J
R 951	RS1/16S102J
R 952	RS1/16S153J
R 953	RS1/16S332J
R 954	RS1/16S471J
R 955	RS1/4SA101J
R 956	RS1/16S0R0J
R 957	RS1/16S222J

**CAPACITORS**

C 101	CKSQYB225K10
C 102	CKSQYB225K10
C 103	CKSQYB225K10
C 104	CKSQYB225K10
C 105	CKSRYB224K16
C 106	CKSRYB224K16
C 107	CKSRYB474K10
C 108	CKSRYB474K10
C 109	CKSRYB104K16
C 110	CKSYB106K6R3
C 111	CKSYB106K6R3
C 112	CKSRYB105K10
C 113	CKSRYB104K16
C 114	CCSRCH101J50
C 116	CCSRCH101J50
C 117	CKSYB106K6R3
C 118	CKSYB106K6R3
C 120	CKSYB106K6R3
C 121	CKSRYB472K50
C 122	CKSRYB472K50
C 123	CCSRCH471J50
C 124	CCSRCH471J50
C 125	CKSRYB473K50
C 126	CCSRCH101J50
C 151	CKSRYB103K50
C 152	CKSYB106K6R3
C 153	CKSYB106K6R3
C 154	CKSRYB105K10
C 155	CKSRYB222K50

**Circuit Symbol and No. Part NamePart No.**

C 156	CKSRYB105K10
C 201	CCSRCH101J50
C 202	CCSRCH101J50
C 203	CCSRCH101J50
C 204	CCSRCH101J50
C 207	CKSRYB102K50
C 208	CKSRYB102K50
C 209	CKSRYB102K50
C 210	CKSRYB102K50
C 213	CCSRCH101J50
C 214	CCSRCH101J50
C 215	CCSRCH101J50
C 216	CCSRCH101J50
C 219	CKSRYB102K50
C 220	CKSRYB102K50
C 221	CKSRYB102K50
C 222	CKSRYB102K50
C 231	CCSRCH101J50
C 232	CCSRCH101J50
C 233	CCSRCH101J50
C 234	CKSRYB102K50
C 235	CKSRYB102K50
C 236	CCSRCH101J50
C 237	CEAT331M6R3
C 238	CEAL100M16
C 239	CCSRCH101J50
C 251	CCSRCH470J50
C 252	CCSRCH470J50
C 253	CCSRCH470J50
C 254	CCSRCH470J50
C 255	CCSRCH470J50
C 256	CCSRCH470J50
C 257	CCSRCH470J50
C 258	CCSRCH470J50
C 259	10μF CCG1138
C 260	10μF CCG1138
C 261	10μF CCG1138
C 262	10μF CCG1138
C 263	10μF CCG1138
C 264	10μF CCG1138
C 265	CKSRYB105K10
C 266	CKSRYB105K10
C 301	CKSRYB223K50
C 302	CEAL100M16
C 303	CEAL220M10
C 304	CKSRYB222K50
C 305	CKSRYB222K50
C 306	CCSQCH101J50
C 307	CCSRCH181J50
C 308	CCSQCH101J50
C 309	CCSRCH181J50
C 351	CKSRYB102K50
C 352	CEJQ101M16
C 353	CKSRYB104K16
C 354	CEAL100M16
C 355	CASA4R7M16
C 357	CKSRYB105K6R3
C 358	CKSYB106K6R3
C 405	CKSRYB103K50
C 406	CKSRYB183K50

**Circuit Symbol and No. Part NamePart No.**

C 407	CKSRYB183K50
C 408	CEJQ101M6R3
C 409	CKSRYB103K50
C 410	CEJQ101M16
C 411	CKSRYB472K50
C 412	CKSRYB103K50
C 421	CKSRYB474K10
C 501	CEAL100M16
C 502	CKSRYB104K16
C 503	CKSYB106K6R3
C 504	CKSRYB104K16
C 505	CKSRYB105K10
C 506	CKSRYB104K16
C 507	CKSRYB472K50
C 508	CCSRCH220J50
C 509	CCSRCH220J50
C 551	CKSRYB102K50
C 552	CKSRYB102K50
C 601	CKSRYB104K16
C 602	CCSRCH180J50
C 603	CKSYB106K6R3
C 604	CCSRCH101J50
C 605	CCSRCH180J50
C 607	CCSRCH220J50
C 608	CCSRCH180J50
C 609	CKSRYB104K16
C 610	CKSRYB102K50
C 611	CKSRYB103K50
C 612	CKSRYB103K50
C 613	CKSRYB103K50
C 614	CKSRYB102K50
C 615	CKSRYB102K50
C 616	CKSRYB104K16
C 617	CKSRYB104K16
C 618	CCSRCH101J50
C 619	CKSRYB104K16
C 620	CCSRCH101J50
C 702	CKSRYB103K50
C 703	CEAL470M10
C 704	CKSYB475K10
C 705	CKSYB475K10
C 706	CKSYB475K10
C 707	CKSYB475K10
C 751	CKSRYB104K16
C 752	CKSRYB104K16
C 771	CCSRCH681J50
C 772	CCSRCH681J50
C 810	CKSRYB103K50
C 811	CCSRCH101J50
C 841	CCSRCH221J50
C 842	CKSRYB103K50
C 852	CKSRYB102K50
C 853	CCSRCH181J50
C 861	CKSRYB473K50
C 862	CKSRYB473K50
C 871	CKSRYB103K50
C 881	CKSRYB224K16
C 901	CKSRYB105K10
C 902	CASA470M20
C 903	CKSRYB102K50

**Circuit Symbol and No. Part NamePart No.**

C 904	CKSRYB104K25
C 905	CKSRYB104K16
C 906	CKSRYB105K10
C 907	CEHAR470M16
C 908	CEJQ470M10
C 909	CEHAT331M10
C 910	CCSRCH101J50
C 911	CKSRYB102K50
C 912	CKSQYB104K25
C 913	CEJQ4R7M35
C 914	CCSRCH101J50
C 915	CKSRYB104K16
C 916	CEJQ100M25
C 917	CKSRYB102K50
C 918	CEHAT331M10
C 919	CKSRYB223K50
C 920	CKSRYB104K25
C 921	CEJQ220M10
C 922	CASA330M10
C 923	CKSRYB103K50
C 924	CEJQ470M6R3
C 925	470μF/6.3V
C 926	100μF/10V
C 927	CCH1182
C 928	CCH1323
C 929	CKSRYB103K50
	CKSRYB105K10
	CEHAR101M10
C 930	3300μF/16V
C 931	CCH1163(P35)
C 932	CKSRYB103K50
C 933	CKSRYB104K25
C 934	CKSRYB153K50
	CKSYB105K16
C 937	CEAT102M16(P35)
C 938	CKSRYB103K50
C 939	CKSRYB103K50
C 940	0.1F/5.5V
C 941	CCL1023
	CKSRYB473K50
C 942	CKSRYB104K25
C 943	CKSYB105K16
C 944	CCSRCH102J50

**B**

**Unit Number:CWM7805**  
**Unit Name:DSP Unit**

**MISCELLANEOUS**

IC 1001	IC	PD2071A
IC 1051	IC	PD2071A
IC 1101	IC	NJM4558MD
IC 1102	IC	NJM4558MD
IC 1201	IC	NJM4558MD
IC 1202	IC	NJM4558MD
IC 1203	IC	NJM4558MD
D 1101	Diode	HZU4R3(B2)
L 1001	Inductor	LCTA2R2J2520
L 1002	Inductor	CTF1379
L 1003	Inductor	CTF1379
L 1004	Inductor	CTF1379

**Circuit Symbol and No. Part NamePart No.**

L 1005	Inductor	CTF1379
L 1006	Inductor	CTF1379
L 1007	Inductor	CTF1379
L 1009	Inductor	CTF1379
L 1010	Inductor	LCTA2R2J2520
L 1011	Inductor	CTF1379
L 1012	Inductor	CTF1379
L 1013	Inductor	CTF1379
L 1014	Inductor	CTF1379
L 1016	Inductor	CTF1379
L 1017	Inductor	CTF1379
L 1018	Inductor	CTF1379
L 1019	Inductor	CTF1379
L 1020	Inductor	CTF1379
L 1021	Inductor	CTF1379
L 1022	Inductor	CTF1379
L 1023	Inductor	CTF1378
L 1051	Inductor	LCTA2R2J2520
L 1052	Inductor	CTF1379
L 1053	Inductor	CTF1379
L 1054	Inductor	CTF1379
L 1055	Inductor	CTF1379
L 1056	Inductor	CTF1379
L 1058	Inductor	CTF1379
L 1059	Inductor	CTF1379
L 1060	Inductor	LCTA2R2J2520
L 1061	Inductor	CTF1379
L 1062	Inductor	CTF1379
L 1063	Inductor	CTF1379
L 1064	Inductor	CTF1379
L 1066	Inductor	CTF1379
L 1067	Inductor	CTF1379
L 1068	Inductor	CTF1379
L 1069	Inductor	CTF1379
L 1070	Inductor	CTF1379
L 1071	Inductor	CTF1379
L 1072	Inductor	CTF1379
X 1001	Radiator 22.5792MHz	CSS1406

**RESISTORS**

R 1001	RS1/16S221J
R 1002	RS1/16S221J
R 1004	RS1/16S473J
R 1005	RS1/16S471J
R 1006	RS1/16S221J
R 1007	RS1/16S471J
R 1008	RS1/16S471J
R 1009	RS1/16S471J
R 1011	RS1/16S471J
R 1012	RS1/16S471J
R 1013	RS1/16S471J
R 1014	RS1/16S473J
R 1015	RS1/16S473J
R 1016	RS1/16S473J
R 1017	RS1/16S473J
R 1018	RS1/16S473J
R 1019	RS1/16S473J
R 1020	RS1/16S225J
R 1021	RS1/16S102J
R 1022	RS1/16S473J

**Circuit Symbol and No. Part NamePart No.**

R 1051	RS1/16S473J
R 1052	RS1/16S471J
R 1053	RS1/16S0R0J
R 1054	RS1/16S0R0J
R 1055	RS1/16S0R0J
R 1056	RS1/16S471J
R 1057	RS1/16S471J
R 1058	RS1/16S471J
R 1060	RS1/16S471J
R 1061	RS1/16S471J
R 1062	RS1/16S471J
R 1063	RS1/16S473J
R 1064	RS1/16S473J
R 1065	RS1/16S473J
R 1066	RS1/16S473J
R 1067	RS1/16S473J
R 1068	RS1/16S473J
R 1069	RS1/16S225J
R 1070	RS1/16S473J
R 1101	RS1/16S224J
R 1102	RS1/16S224J
R 1103	RS1/16S103J
R 1104	RS1/16S103J
R 1107	RS1/16S103J
R 1108	RS1/16S103J
R 1109	RS1/16S123J
R 1110	RS1/16S123J
R 1111	RS1/16S391J
R 1112	RS1/16S224J
R 1113	RS1/16S224J
R 1114	RS1/16S103J
R 1115	RS1/16S103J
R 1118	RS1/16S103J
R 1119	RS1/16S103J
R 1120	RS1/16S123J
R 1121	RS1/16S123J
R 1201	RS1/16S224J
R 1202	RS1/16S224J
R 1203	RS1/16S472J
R 1204	RS1/16S472J

R 1207	RS1/16S472J
R 1208	RS1/16S472J
R 1209	RS1/16S472J
R 1210	RS1/16S472J
R 1211	RS1/16S224J

R 1212	RS1/16S224J
R 1213	RS1/16S472J
R 1214	RS1/16S472J
R 1217	RS1/16S472J
R 1218	RS1/16S472J

R 1219	RS1/16S472J
R 1220	RS1/16S472J
R 1221	RS1/16S224J
R 1223	RS1/16S472J
R 1227	RS1/16S472J

R 1229	RS1/16S472J
R 1231	RS1/16S103J

**CAPACITORS**

C 1001	CEAL470M6R3
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**Circuit Symbol and No. Part NamePart No.**

C 1002 CEAL470M6R3  
 C 1003 CKSRYB104K16  
 C 1004 CKSRYB104K16  
 C 1005 CEAL470M6R3

A C 1006 CEAL470M6R3  
 C 1007 CEAL470M6R3  
 C 1008 CKSRYB104K16  
 C 1009 CEAL470M6R3  
 C 1010 CEAL470M6R3

C 1011 CEAL470M6R3  
 C 1012 CKSRYB104K16  
 C 1013 CKSRYB104K16  
 C 1014 CEAL470M6R3  
 C 1015 CKSRYB104K16

C 1016 CKSRYB104K16  
 C 1017 CKSRYB104K16  
 C 1018 CKSRYB104K16  
 C 1019 CEAL470M6R3  
 C 1020 CEAL470M6R3

B C 1021 CEAL470M6R3  
 C 1022 CEAL470M6R3  
 C 1023 CKSRYB104K16  
 C 1024 CCSRCH120J50  
 C 1025 CCSRCH120J50

C 1027 CKSRYB104K16  
 C 1031 CKSRYB104K16  
 C 1032 CKSRYB104K16  
 C 1051 CEAL470M6R3  
 C 1052 CEAL470M6R3

C 1053 CKSRYB104K16  
 C 1054 CKSRYB104K16  
 C 1055 CEAL470M6R3  
 C 1056 CEAL470M6R3  
 C 1057 CEAL470M6R3

C 1058 CKSRYB104K16  
 C 1059 CEAL470M6R3  
 C 1060 CEAL470M6R3  
 C 1061 CEAL470M6R3  
 C 1062 CKSRYB104K16

C 1063 CKSRYB104K16  
 C 1064 CEAL470M6R3  
 C 1065 CKSRYB104K16  
 C 1066 CKSRYB104K16  
 C 1067 CKSRYB104K16

C 1068 CKSRYB104K16  
 C 1069 CEAL470M6R3  
 C 1070 CEAL470M6R3  
 C 1071 CEAL470M6R3  
 C 1072 CEAL470M6R3

C 1073 CKSRYB104K16  
 C 1075 CKSRYB103K50  
 C 1076 CKSRYB104K16  
 C 1081 CKSRYB104K16  
 C 1082 CKSRYB104K16

D C 1101 CKSRYB105K10  
 C 1102 CKSRYB105K10  
 C 1103 CCSRCH220J50  
 C 1104 CCSRCH220J50  
 C 1105 CCSRCH221J50

C 1106 CCSRCH221J50

**Circuit Symbol and No. Part NamePart No.**

C 1107 CKSRYB103K50  
 C 1108 CKSRYB102K50  
 C 1109 CEAL101M6R3  
 C 1110 CKSRYB105K10

C 1111 CKSRYB105K10  
 C 1112 CCSRCH220J50  
 C 1113 CCSRCH220J50  
 C 1114 CCSRCH221J50  
 C 1115 CCSRCH221J50

C 1116 CKSRYB103K50  
 C 1117 CEALNP4R7M35  
 C 1118 CEALNP4R7M35  
 C 1119 CEALNP4R7M35  
 C 1120 CEALNP4R7M35

C 1201 CKSRYB105K10  
 C 1202 CKSRYB105K10  
 C 1203 CCSRCH681J50  
 C 1204 CCSRCH681J50  
 C 1205 CKSRYB182K50

C 1206 CKSRYB182K50  
 C 1207 CCSRCH101J50  
 C 1208 CCSRCH101J50  
 C 1209 CKSRYB103K50  
 C 1210 CKSQYB225K10

C 1211 CKSQYB225K10  
 C 1212 CKSRYB105K10  
 C 1213 CKSRYB105K10  
 C 1214 CCSRCH681J50  
 C 1215 CCSRCH681J50

C 1216 CKSRYB182K50  
 C 1217 CKSRYB182K50  
 C 1218 CCSRCH101J50  
 C 1219 CCSRCH101J50  
 C 1220 CKSRYB103K50

C 1221 CKSQYB225K10  
 C 1222 CKSQYB225K10  
 C 1223 CKSRYB105K10  
 C 1225 CCSRCH681J50  
 C 1227 CKSRYB182K50

C 1229 CCSRCH101J50  
 C 1231 CKSRYB103K50  
 C 1232 CKSQYB225K10

**F**

**Unit Number:CWM7801  
 (AVX-MG2037ZF, MG2137ZF)**

**Unit Name:Panel PCB Unit**

**MISCELLANEOUS**

IC 1801	IC	BU2099FV
Q 1801	Transistor	DTC144EU
Q 1802	Transistor	DTC144EU
Q 1804	Transistor	2SB1132
D 1807	LED	CL170PGCD(AB)
D 1808	LED	CL170PGCD(AB)
D 1809	LED	CL170PGCD(AB)
D 1810	LED	CL170PGCD(AB)
D 1811	LED	CL170PGCD(AB)

**Circuit Symbol and No. Part NamePart No.**

D 1812	LED	CL170PGCD(AB)
D 1815	LED	CL170PGCD(AB)
D 1816	LED	CL170PGCD(AB)
D 1817	Diode	DAN202U
D 1820	Diode	RB751V40
D 1831	LED	CL170PGCD(AB)

D 1832	LED	CL170PGCD(AB)
D 1833	LED	CL170PGCD(AB)
D 1834	LED	CL170PGCD(AB)
D 1835	LED	CL170PGCD(AB)
D 1836	LED	CL170PGCD(AB)

D 1837	LED	CL170PGCD(AB)
D 1838	LED	CL170PGCD(AB)
D 1839	LED	CL170PGCD(AB)
S 1801	Push Switch	CSG1126
S 1802	Push Switch	CSG1126

S 1803	Push Switch	CSG1126
S 1804	Push Switch	CSG1126
S 1805	Push Switch	CSG1126
S 1806	Push Switch	CSG1126
S 1807	Push Switch	CSG1126

S 1808	Push Switch	CSG1126
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**RESISTORS**

R 1801	RS1/16S561J
R 1802	RS1/16S561J
R 1803	RS1/16S561J
R 1804	RS1/16S561J
R 1806	RS1/10S201J

R 1807	RS1/10S181J
R 1808	RS1/10S201J
R 1809	RS1/10S181J
R 1810	RS1/10S201J
R 1811	RS1/10S181J

R 1812	RS1/10S201J
R 1813	RS1/10S181J
R 1814	RS1/10S201J
R 1815	RS1/10S181J
R 1816	RS1/10S201J

R 1817	RS1/10S181J
R 1818	RS1/16S223J
R 1819	RS1/16S222J
R 1820	RS1/10S221J
R 1821	RS1/10S221J

R 1822	RS1/10S221J
R 1823	RS1/10S221J
R 1824	RS1/10S221J
R 1825	RS1/10S221J
R 1826	RS1/10S221J

R 1827	RS1/10S221J
R 1828	RS1/10S221J
R 1829	RS1/10S221J
R 1830	RS1/10S221J
R 1831	RS1/10S221J

R 1832	RS1/16S221J
R 1833	RS1/16S221J
R 1834	RS1/10S221J
R 1835	RS1/10S221J
R 1836	RS1/10S331J

**Circuit Symbol and No. Part NamePart No.**

R 1837	RS1/10S331J
R 1838	RS1/10S331J
R 1839	RS1/10S331J
R 1840	RS1/16S221J
R 1841	RS1/16S221J

**CAPACITORS**

C 1801	CKSRYB104K25
C 1802	CKSRYB104K16
C 1821	CKSQYB104K25
C 1822	CKSQYB104K25
C 1823	CKSQYB104K25

C 1824	CKSQYB104K25
C 1825	CKSQYB104K25
C 1826	CKSQYB104K25

**F**

**Unit Number:CWM7806**  
**(AVX-MG2237ZF, MG2337ZF)**

**Unit Name:Panel PCB Unit**

**MISCELLANEOUS**

IC 1801	IC	BU2099FV
Q 1801	Transistor	DTC144EU
Q 1802	Transistor	DTC144EU
Q 1804	Transistor	2SB1132
D 1807	Chip LED	LWM673-Q2R2-4C4D

D 1808	Chip LED	LWM673-Q2R2-4C4D
D 1809	Chip LED	LWM673-Q2R2-4C4D
D 1810	Chip LED	LWM673-Q2R2-4C4D
D 1811	Chip LED	LWM673-Q2R2-4C4D
D 1812	Chip LED	LWM673-Q2R2-4C4D

D 1815	Chip LED	LWM673-Q2R2-4C4D
D 1816	Chip LED	LWM673-Q2R2-4C4D
D 1817	Diode	DAN202U
D 1820	Diode	RB751V40
D 1831	Chip LED	LWM673-Q2R2-4C4D

D 1832	Chip LED	LWM673-Q2R2-4C4D
D 1833	Chip LED	LWM673-Q2R2-4C4D
D 1834	Chip LED	LWM673-Q2R2-4C4D
D 1835	Chip LED	LWM673-Q2R2-4C4D
D 1836	Chip LED	LWM673-Q2R2-4C4D

D 1837	Chip LED	LWM673-Q2R2-4C4D
D 1838	Chip LED	LWM673-Q2R2-4C4D
D 1839	Chip LED	LWM673-Q2R2-4C4D
S 1801	Push Switch	CSG1126
S 1802	Push Switch	CSG1126

S 1803	Push Switch	CSG1126
S 1804	Push Switch	CSG1126
S 1805	Push Switch	CSG1126
S 1806	Push Switch	CSG1126
S 1807	Push Switch	CSG1126

S 1808	Push Switch	CSG1126
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**RESISTORS**

R 1801	RS1/16S561J
R 1802	RS1/16S561J
R 1803	RS1/16S561J

**Circuit Symbol and No. Part NamePart No.**

R 1804	RS1/16S561J
R 1806	RS1/10S391J
R 1807	RS1/10S681J
R 1808	RS1/10S391J
R 1809	RS1/10S681J
R 1810	RS1/10S391J
R 1811	RS1/10S681J
R 1812	RS1/10S391J
R 1813	RS1/10S681J
R 1814	RS1/10S391J
R 1815	RS1/10S681J
R 1816	RS1/10S391J
R 1817	RS1/10S681J
R 1818	RS1/16S223J
R 1819	RS1/16S222J
R 1820	RS1/10S681J
R 1821	RS1/10S391J
R 1822	RS1/10S681J
R 1823	RS1/10S391J
R 1824	RS1/10S681J
R 1825	RS1/10S391J
R 1826	RS1/10S681J
R 1827	RS1/10S391J
R 1828	RS1/10S681J
R 1829	RS1/10S391J
R 1830	RS1/10S681J
R 1831	RS1/10S391J
R 1832	RS1/16S391J
R 1833	RS1/16S331J
R 1834	RS1/10S102J
R 1835	RS1/10S561J
R 1836	RS1/10S391J
R 1837	RS1/10S681J
R 1838	RS1/10S391J
R 1839	RS1/10S681J
R 1840	RS1/16S391J
R 1841	RS1/16S331J

**CAPACITORS**

C 1801	CKSRYB104K25
C 1802	CKSRYB104K16
C 1803	CKSRYB104K16
C 1804	CKSQYB104K25
C 1805	CKSRYB104K16
C 1811	CKSQYB104K25
C 1812	CKSQYB104K25
C 1813	CKSQYB104K25
C 1814	CKSQYB104K25
C 1815	CKSQYB104K25
C 1816	CKSQYB104K25
C 1821	CKSQYB104K25
C 1822	CKSQYB104K25
C 1823	CKSQYB104K25
C 1824	CKSQYB104K25
C 1825	CKSQYB104K25
C 1826	CKSQYB104K25

**Circuit Symbol and No. Part NamePart No.****Unit Number:CWM9123****Unit Name:Module Unit****MISCELLANEOUS**

IC 4001	IC	IR3Y29B
IC 4062	IC	TC7S32FU
IC 4081	IC	NJM2286V
IC 4082	IC	NJM2235V
IC 4101	IC	NJM082BV
IC 4121	IC	M62354GP
IC 4171	IC	NJM062V
IC 4301	IC	TC160G11AF-1146
IC 4303	IC	NJM2107F
IC 4351	IC	TC7W02FU
Q 4101	Transistor	FMY3A
Q 4102	Transistor	FMY4A
Q 4161	Transistor	2SA1577
Q 4162	Transistor	2SC3518-Z
Q 4163	Transistor	2SC3518-Z
Q 4164	Transistor	DTC114EU
Q 4201	Transistor	2SC4116
Q 4202	Transistor	2SC4116
Q 4203	Transistor	2SA1586
Q 4204	Transistor	2SA1586
Q 4301	Transistor	2SC4097
D 4181	Diode	MA728
D 4182	Diode	MA728
D 4183	Diode	MA728
D 4201	Diode	MA8051(M)
D 4202	Diode	MA8051(M)
D 4203	Diode	MA8051(M)
D 4204	Diode	MA8051(M)
D 4205	Diode	MA8051(M)
D 4206	Diode	MA8051(M)
D 4207	Diode	MA8051(M)
D 4212	Diode	MA8051(M)
D 4213	Diode	MA8051(M)
D 4301	Diode	MA111
D 4302	Diode	1SV231
D 4303	Diode	MA111
L 4001	Inductor	LCTA100J3225
L 4002	Inductor	LCTA100J3225
L 4081	Inductor	LCTA100J3225
L 4101	Inductor	LCTA101J3225
L 4102	Inductor	LCTA101J3225
L 4121	Inductor	LCTB100K2125
L 4122	Inductor	LCTB100K2125
L 4161	Coil	CTH1195
L 4162	Coil	CTH1195
L 4171	Inductor	LCTA101J3225
L 4301	Inductor	LCTA150J3225
L 4302	Coil	CTE1157
L 4303	Inductor	CTF1306
L 4304	Inductor	LCTB100K2125
L 4305	Chip-Inductor	LCTA2R2J3225
L 4306	Inductor	LCTB100K2125
L 4307	Inductor	CTF1306
L 4308	Inductor	CTF1306
L 4310	Inductor-Array	CTF1421



**Circuit Symbol and No. Part NamePart No.**

L 4311	Inductor-Array	CTF1421
L 4312	Inductor	CTF1306
L 4313	Inductor	CTF1306
T 4161	Transformer	CTT1114
T 4162	Transformer	CTT1114

VR4002	Semi-fixed 33kΩ(B)	CCP1426
VR4003	Semi-fixed 33kΩ(B)	CCP1426
VR4004	Semi-fixed 33kΩ(B)	CCP1426
VR4005	Semi-fixed 33kΩ(B)	CCP1426
VR4006	Semi-fixed 10kΩ(B)	CCP1423

VR4101	Semi-fixed 10kΩ(B)	CCP1423
FU4161	Fuse 1.6A	CEK1256
EF4305	EMI Filter	CCG1060

**RESISTORS**

R 4014	RS1/16S6202D
R 4015	RS1/16S153J
R 4016	RS1/16S273J
R 4017	RS1/16S273J
R 4018	RS1/16S473J

R 4019	RS1/16S273J
R 4020	RS1/16S513J
R 4022	RS1/16S333J
R 4023	RS1/16S473J
R 4024	RS1/16S333J

R 4025	RS1/16S473J
R 4026	RS1/16S101J
R 4027	RS1/16S101J
R 4028	RS1/16S561J
R 4029	RS1/16S102J

R 4031	RS1/16S393J
R 4032	RS1/16S513J
R 4033	RS1/16S563J
R 4034	RS1/16S473J
R 4036	RS1/16S682J

R 4037	RS1/16S682J
R 4038	RS1/16S682J
R 4039	RS1/16S1802D
R 4040	RS1/16S124J
R 4041	RS1/16S2402D

R 4042	RS1/16S3602D
R 4047	RS1/16S101J
R 4048	RS1/16S101J
R 4049	RS1/16S101J
R 4061	RS1/16S473J

R 4081	RS1/16S105J
R 4082	RS1/16S105J
R 4083	RS1/16S105J
R 4084	RS1/16S104J
R 4085	RS1/16S473J

R 4087	RS1/16S473J
R 4101	RS1/16S303J
R 4102	RS1/16S913J
R 4103	RS1/16S113J
R 4104	RS1/16S473J

R 4105	RS1/16S363J
R 4106	RS1/16S473J
R 4107	RS1/16S101J
R 4108	RS1/16S153J
R 4109	RS1/16S100J

**Circuit Symbol and No. Part NamePart No.**

R 4110	RS1/16S153J
R 4111	RS1/16S100J
R 4123	47kΩCCN1131
R 4161	RS1/16S102J
R 4162	RS1/10S222J

R 4163	RS1/4S751J
R 4164	RS1/4S821J
R 4171	RS1/16S103J
R 4172	RS1/16S104J
R 4173	RS1/16S104J

R 4174	RS1/16S104J
R 4175	RS1/16S105J
R 4176	RS1/16S103J
R 4177	RS1/16S103J
R 4178	RS1/16S103J

R 4201	RS1/16S104J
R 4202	RS1/16S104J
R 4205	RS1/16S102J
R 4206	RS1/16S102J
R 4207	RS1/16S472J

R 4208	RS1/16S472J
R 4209	RS1/16S102J
R 4210	RS1/16S102J
R 4211	RS1/16S472J
R 4222	RS1/16S472J

R 4303	RS1/16S621J
R 4305	680Ω CCN1119
R 4306	680Ω CCN1119
R 4308	RS1/16S105J
R 4309	RS1/16S1R0J

R 4310	RS1/16S331J
R 4311	RS1/16S272J
R 4312	RS1/16S332J
R 4314	RS1/16S153J
R 4315	RS1/16S105J

R 4316	RS1/16S103J
R 4317	RS1/16S123J
R 4318	RS1/16S683J
R 4319	RS1/16S472J
R 4320	RS1/16S563J

R 4321	RS1/16S332J
R 4322	RS1/16S221J
R 4325	RS1/16S220J
R 4326	RS1/16S750J
R 4328	RS1/16S0R0J

R 4329	RS1/16S0R0J
R 4332	1kΩCCN1120
R 4333	1kΩCCN1120
R 4334	RS1/16S0R0J
R 4335	RS1/16S0R0J

R 4351	RS1/16S222J
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**CAPACITORS**

C 4001	CKSRYB103K50
C 4002	CKSRYB104K25
C 4003	CKSRYB103K50
C 4004	CKSRYB473K50
C 4005	CKSRYB104K25
C 4007	CKSRYB103K50
C 4008	CKSRYB103K50

**Circuit Symbol and No. Part NamePart No.**

C 4010 CKSRYB105K10  
 C 4011 CKSRYB105K10  
 C 4012 CKSQYB105K16

C 4013 CSZSR330M10  
 C 4014 CKSRYB105K10  
 C 4015 CKSRYB103K50  
 C 4016 CKSRYB103K50  
 C 4017 CKSRYB103K50

C 4018 CKSRYB105K10  
 C 4019 CKSRYB103K50  
 C 4020 CKSRYB103K50  
 C 4023 CKSRYB103K50  
 C 4024 CKSRYB103K50

C 4026 CKSRYB104K25  
 C 4027 CKSRYB104K25  
 C 4028 CKSRYB104K25  
 C 4029 CKSRYB105K10  
 C 4030 CSZSR330M10

C 4031 CKSRYB682K50  
 C 4032 CKSQYB105K16  
 C 4033 CKSRYB105K10  
 C 4034 CCSRCH821J50  
 C 4063 CKSRYB104K25

C 4081 CSZSR330M10  
 C 4082 CKSRYB104K25  
 C 4083 CCSRCH101J50  
 C 4084 CCSRCH101J50  
 C 4085 CCSRCH101J50

C 4086 CKSRYB105K10  
 C 4087 CKSRYB105K10  
 C 4088 CKSRYB105K10  
 C 4089 CKSRYB104K25  
 C 4090 CCSRCH101J50

C 4091 CKSRYB105K10  
 C 4092 CKSRYB104K25  
 C 4101 CSZSR330M10  
 C 4102 CKSRYB103K50  
 C 4103 CSZSR4R7M25

C 4104 CKSRYB103K50  
 C 4105 CKSQYB105K16  
 C 4106 CKSQYB105K16  
 C 4107 CKSRYB104K25  
 C 4108 CSZSR4R7M25

C 4121 CSZS100M10  
 C 4122 CKSRYB104K25  
 C 4123 CKSRYB104K25  
 C 4124 CSZS100M10  
 C 4125 CKSRYB104K25

C 4130 CKSRYB104K25  
 C 4136 CKSRYB105K10  
 C 4157 CKSRYB104K25  
 C 4161 CKSRYB104K25  
 C 4162 CKSRYB473K50

C 4163 CKSRYB104K25  
 C 4164 CCH1332  
 C 4165 CKSQYB225K10  
 C 4166 CFHSN104J50  
 C 4167 CCG1140

C 4168 CCG1140  
 C 4171 CSZSR330M10

**Circuit Symbol and No. Part NamePart No.**

C 4172 CKSRYB104K25  
 C 4173 CFHS473J16  
 C 4174 CKSRYB105K10

C 4175 CKSRYB472K50  
 C 4180 CKSRYB102K50  
 C 4181 CKSRYB102K50  
 C 4182 CKSRYB102K50  
 C 4183 CKSRYB102K50

C 4184 CCSRCH101J50  
 C 4185 CCSRCH101J50  
 C 4186 CCSRCH101J50  
 C 4187 CCSRCH101J50  
 C 4190 CKSRYB102K50

C 4205 CKSRYB102K50  
 C 4206 CKSRYB102K50  
 C 4207 CKSRYB102K50  
 C 4208 CKSRYB102K50  
 C 4209 CKSRYB102K50

C 4210 CKSRYB102K50  
 C 4211 CKSRYB102K50  
 C 4212 CKSRYB102K50  
 C 4213 CKSRYB102K50  
 C 4214 CKSRYB102K50

C 4215 CKSRYB102K50  
 C 4216 CKSRYB102K50  
 C 4217 CKSRYB102K50  
 C 4302 CCSRCH561J50  
 C 4303 CKSRYB104K25

C 4304 CSZSR330M10  
 C 4305 CKSRYB104K25  
 C 4306 CKSRYB104K25  
 C 4307 CCSRCH391J50  
 C 4308 CCSRCH221J50

C 4309 CKSRYB102K50  
 C 4310 CCSRCH221J50  
 C 4311 CKSRYB104K25  
 C 4312 CKSRYB184K10  
 C 4313 CKSRYB472K50

C 4314 CKSRYB102K50  
 C 4315 CKSRYB104K25  
 C 4316 CKSRYB104K25  
 C 4317 CKSRYB104K25  
 C 4318 CKSRYB104K25

C 4321 CKSRYB104K25  
 C 4323 CKSRYB104K25  
 C 4324 CSZSR4R7M25  
 C 4325 CKSRYB103K50  
 C 4326 100μF/10V CCH1332

C 4327 CKSRYB103K50  
 C 4328 CSZSR4R7M25  
 C 4329 CKSRYB103K50  
 C 4351 CKSRYB104K25  
 C 4352 CCSRCH102J50



**Unit Number:CWM7802  
 (AVX-MG2037ZF,MG2137ZF)**

**Unit Name:Keyboard Unit**



**Circuit Symbol and No. Part NamePart No.****MISCELLANEOUS**

Q 1851	Transistor	DTC144EU
Q 1852	Transistor	DTC144EU
D 1851	LED	CL170PGCD(AB)
D 1852	LED	CL170PGCD(AB)
D 1853	LED	CL170PGCD(AB)
D 1854	LED	CL170PGCD(AB)
D 1855	LED	CL170PGCD(AB)
D 1856	LED	CL170PGCD(AB)
D 1857	LED	CL170PGCD(AB)
D 1858	Diode	DAN202U
D 1859	Diode	RB751V40
D 1860	Diode	RB751V40
VR1851	Switch(POWER/VOLUME)	CSD1064

**RESISTORS**

R 1851	RS1/10S101J
R 1852	RS1/10S101J
R 1853	RS1/10S101J
R 1854	RS1/10S101J
R 1855	RS1/10S101J
R 1856	RS1/10S101J
R 1857	RS1/10S101J
R 1858	RS1/10S101J
R 1859	RS1/10S101J
R 1860	RS1/10S101J
R 1861	RS1/10S101J
R 1862	RS1/10S101J
R 1863	RS1/10S101J
R 1864	RS1/10S101J



**Unit Number:CWM7807**  
**(AVX-MG2237ZF,MG2337ZF)**

**Unit Name:Keyboard Unit**

**MISCELLANEOUS**

Q 1851	Transistor	DTC144EU
Q 1852	Transistor	DTC144EU
D 1851	Chip LED	LWM673-Q2R2-4C4D
D 1852	Chip LED	LWM673-Q2R2-4C4D
D 1853	Chip LED	LWM673-Q2R2-4C4D
D 1854	Chip LED	LWM673-Q2R2-4C4D
D 1855	Chip LED	LWM673-Q2R2-4C4D
D 1856	Chip LED	LWM673-Q2R2-4C4D
D 1857	Chip LED	LWM673-Q2R2-4C4D
D 1858	Diode	DAN202U
D 1859	Diode	RB751V40
D 1860	Diode	RB751V40
VR1851	Switch(POWER/VOLUME)	CSD1064

**RESISTORS**

R 1851	RS1/10S391J
R 1852	RS1/10S391J
R 1853	RS1/10S101J
R 1854	RS1/10S221J
R 1855	RS1/10S101J

**Circuit Symbol and No. Part NamePart No.**

R 1856	RS1/10S221J
R 1857	RS1/10S101J
R 1858	RS1/10S221J
R 1859	RS1/10S101J
R 1860	RS1/10S221J
R 1861	RS1/10S121J
R 1862	RS1/10S151J
R 1863	RS1/10S121J
R 1864	RS1/10S151J

**Tuner Connector Unit**  
**Consists of**  
**Tuner PCB**  
**Connector PCB**



**Unit Number:**  
**Unit Name:Tuner Connector Unit**

**MISCELLANEOUS**

L 1401	Inductor	LCTA4R7J3225
L 1402	Coil	CTB1103
L 2801	Inductor	CTF1379
L 2802	Inductor	CTF1379
L 2803	Inductor	CTF1379
L 2804	Inductor	CTF1379
L 2806	Inductor	CTF1379
L 2807	Inductor	CTF1379
L 2808	Inductor	CTF1379
L 2809	Inductor	CTF1379
L 2810	Inductor	CTF1379
L 2811	Inductor	CTF1379
L 2813	Inductor	CTF1379
L 2815	Inductor	CTF1379
L 2816	Inductor	CTF1306
L 2817	Inductor	CTF1306
L 2820	Inductor	CTF1379
L 2821	Inductor	CTF1379
L 2822	Inductor	CTF1306
L 2823	Inductor	CTF1306
L 2824	Inductor	CTF1379
L 2825	Inductor	CTF1379
L 2826	Inductor	CTF1379
AR1401	FM/AM Tuner Unit Surge Protrector	CWE1635 DSP-201M-S00B

**RESISTORS**

R 1401	RS1/16S222J
R 1403	RS1/16S473J
R 1404	RS1/16S473J
R 2801	RS1/16S750J
R 2802	RS1/16S750J
R 2803	RS1/16S750J
R 2804	RS1/16S750J
R 2806	RS1/16S0R0J
R 2809	RS1/16S0R0J

**CAPACITORS**

**Circuit Symbol and No. Part NamePart No.**

C 1401	CKSQYB103K50
C 1402	CKSRYB103K50
C 1403	CKSRYB682K50
C 1404	CKSRYB332K50
C 1405	CCSRCH820J50
C 1406	CKSYB105K16
C 1407	CCSRCH101J50
C 2816	CKSRYB102K50
C 2817	CKSRYB102K50
C 2818	CKSRYB102K50
C 2819	CKSRYB102K50

**H****Unit Number:CWX2589****Unit Name:Control Unit(G2F)****MISCELLANEOUS**

IC 201	IC	UPD63711GC
IC 301	IC	BD7962FM
IC 302	IC	S-818A33AUC-BGN
IC 303	IC	BA05SFP
IC 501	IC	SM5903BFP
IC 503	IC	PD4501B
IC 504	IC	TC74VHCT08AFT
IC 505	IC	TC74VHC541FT
IC 507	IC	MSM51V17400F6TFT
IC 702	IC	PD5705B
Q 101	Transistor	2SB1132
Q 601	Transistor	DTC114EK
Q 602	Transistor	DTA123JK
Q 603	Transistor	DTC314TK
Q 604	Transistor	DTC314TK
Q 702	Transistor	UMD3N
D 101	Diode	1SS355
D 301	Diode	S1G-6904G2P
D 303	Diode	S1G-6904G2P
D 601	Chip Diode	MA151WA
L 201	Inductor	CTF1306
L 601	Inductor	CTF1295
TH701	Thermistor	CCX1015
X 201	Radiator 16.93MHz	CSS1581
X 701	Radiator 10.00MHz	CSS1428

**RESISTORS**

R 101	RS1/8S120J
R 102	RS1/8S100J
R 103	RS1/16S222J
R 104	RS1/16S102J
R 105	RS1/16S0R0J
R 201	RS1/16S104J
R 202	RAB4CQ681J
R 203	RS1/16S0R0J
R 204	RS1/16S0R0J
R 205	RS1/16S103J
R 206	RS1/16S393J
R 207	RS1/16S0R0J
R 209	RS1/16S0R0J

**Circuit Symbol and No. Part NamePart No.**

R 210	RS1/16S0R0J
R 211	RS1/16S0R0J
R 212	RS1/16S562J
R 213	RS1/16S153J
R 214	RS1/16S123J
R 216	RS1/16S0R0J
R 217	RS1/16S0R0J
R 220	RS1/16S471J
R 221	RS1/16S681J
R 298	RS1/16S0R0J
R 301	RS1/16S103J
R 302	RS1/16S153J
R 303	RS1/16S103J
R 304	RS1/16S103J
R 305	RS1/16S272J
R 306	RS1/16S272J
R 307	RS1/16S182J
R 308	RS1/16S272J
R 309	RS1/16S682J
R 310	RS1/16S822J
R 311	RS1/16S103J
R 312	RS1/16S681J
R 313	RS1/16S103J
R 314	RS1/16S153J
R 315	RS1/16S153J
R 316	RS1/16S153J
R 317	RS1/16S103J
R 318	RS1/16S103J
R 319	RS1/16S102J
R 320	RS1/16S392J
R 322	RS1/16S103J
R 323	RS1/16S103J
R 324	RS1/16S103J
R 325	RS1/16S103J
R 502	RS1/16S102J
R 503	RAB4CQ681J
R 504	RS1/16S331J
R 508	RS1/16S392J
R 511	RS1/16S0R0J
R 512	RS1/16S333J
R 513	RS1/16S473J
R 516	RS1/16S331J
R 601	RS1/16S102J
R 602	RS1/16S102J
R 603	RS1/16S223J
R 604	RS1/16S223J
R 605	RS1/16S102J
R 606	RS1/16S681J
R 607	RS1/16S681J
R 608	RS1/16S102J
R 609	RAB4CQ681J
R 701	RAB4CQ104J
R 702	RS1/16S222J
R 703	RS1/16S681J
R 704	RAB4CQ222J
R 705	RAB4CQ681J
R 706	RS1/16S473J
R 707	RS1/16S473J

**RESISTORS**

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AVX-MG2037ZF/XN/UC

**Circuit Symbol and No. Part NamePart No.**

R 708	RS1/16S222J
R 709	RS1/16S222J
R 711	RAB4CQ104J
R 712	RS1/16S473J
R 713	RS1/16S681J
R 714	RS1/16S473J
R 715	RAB4CQ222J
R 716	RS1/16S103J
R 718	RS1/16S473J
R 719	RS1/16S104J
R 720	RS1/16S103J
R 724	RS1/16S104J
R 727	RS1/16S0R0J
R 734	RS1/16S104J
R 736	RS1/16S681J
R 739	RS1/16S473J
R 741	RS1/16S104J
R 742	RS1/16S222J
R 743	RS1/16S681J
R 758	RS1/16S822J
R 759	RS1/16S103J
R 760	RS1/16S433J
R 767	RS1/16S154J
R 775	RAB4CQ681J

**CAPACITORS**

C 101	CKSRYB103K25
C 102	CKSRYB104K25
C 103	CEVL101M10
C 104	CEVL470M6R3
C 105	CKSRYB224K16
C 106	CKSRYB224K16
C 107	CKSRYB224K16
C 201	CKSRYB104K25
C 202	CEVL220M16
C 203	CKSRYB473K25
C 204	CKSRYB182K50
C 205	CKSRYB104K25
C 206	CKSRYB152K50
C 207	CKSRYB224K16
C 208	CCSRCH180J50
C 209	CCSRCK2R0C50
C 210	CCSRCH181J50
C 211	CCSRCH510J50
C 212	CKSRYB682K50
C 213	CKSRYB104K25
C 214	CKSRYB104K25
C 215	CKSRYB103K25
C 216	CKSRYB104K25
C 217	CKSRYB104K25
C 218	CKSRYB104K25
C 219	CKSRYB104K25
C 220	CKSRYB104K25
C 221	CEVL470M6R3
C 222	CKSRYB104K25
C 223	CKSRYB102K50
C 224	CKSRYB104K25
C 225	CKSRYB103K25
C 226	CCSRCH510J50
C 301	CEVL101M10

**Circuit Symbol and No. Part NamePart No.**

C 302	CKSRYB224K16
C 303	CKSRYB224K16
C 304	10μF/10V CCH1349
C 305	CKSRYB224K16
C 306	10μF/10V CCH1349
C 307	CKSRYB224K16
C 309	CKSYB475K16
C 501	CKSRYB102K50
C 502	CKSRYB104K25
C 503	CKSRYB104K25
C 504	CKSRYB104K25
C 505	CKSRYB104K25
C 506	CKSRYB104K25
C 508	CKSRYB104K25
C 509	CKSRYB104K25
C 601	CEVL220M6R3
C 602	CEVL220M6R3
C 701	CKSRYB104K25
C 702	CKSRYB104K25
C 703	CKSRYB103K25
C 704	CKSRYB103K25
C 705	CKSRYB104K25
C 706	CKSRYB104K25
C 707	CKSRYB103K25
C 708	CKSRYB473K25

**J**

**Unit Number:**  
**Unit Name:PCB Unit(Load)**

Q 21	Photo-transistor	CPT231SCTU
Q 22	Photo-transistor	CPT231SCTU
L 21	Inductor	LCYBR15J1608
L 22	Inductor	LCYBR15J1608
S 21	Spring Switch(LOAD1)	CSN1051
S 22	Spring Switch(LOAD2)	CSN1052

**I**

**Unit Number:CWX2614**  
**Unit Name:PCB Unit(LED)**

D 31	Chip LED	CL205IRXTU
D 32	Chip LED	CL205IRXTU
S 31	Spring Switch(CAMLOAD)	CSN1052
S 32	Spring Switch(CAMEOK)	CSN1052
R 31		RS1/16S0R0J

**L**

**Unit Number:CWX2611**  
**Unit Name:PCB Unit**

L 1	Inductor	CTF1389
S 41	Spring Switch(LOAD3)	CSN1051

**K**

Circuit Symbol and No. Part NamePart No.

Unit Number:CWX2613  
Unit Name:PCB Unit(Side)

MISCELLANEOUS

A	S 11	Spring Switch(CAMCLMP)	CSN1052
	VR11	Semi-fixed 1kΩ(B)	CCP1338

RESISTORS

R 11	RS1/16S562J
R 12	RS1/16S562J
R 13	RS1/10S391J
R 14	RS1/10S391J
R 15	RS1/16S0R0J
R 16	RS1/16S0R0J

CAPACITORS

C 12	CKSRYB104K25
------	--------------



Unit Number:  
Unit Name:PCB Unit(M2 Unit)

IC 1	IC	BA6849FS
S 1	Switch(HOME)	CSN1057
S 2	Switch(CLAMP)	CSN1057

RESISTORS

R 1	RS1/16S221J
R 2	RS1/16S221J
R 3	RS1/16S4R7J
R 4	RS1/16S1R0J

CAPACITORS

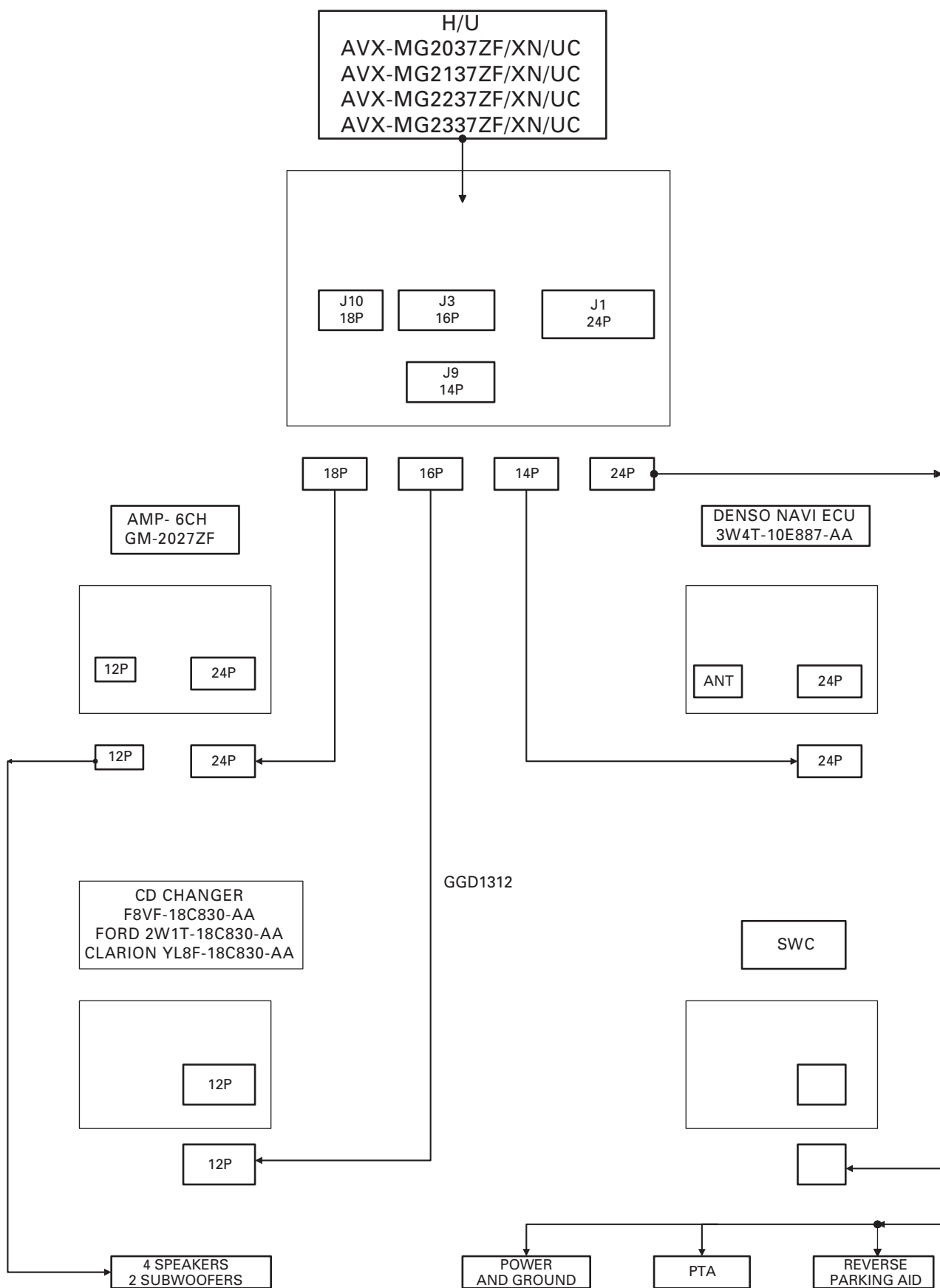
C 1	CKSRYB104K16
-----	--------------

Miscellaneous Parts List

M 1	Motor Unit(-A)(CAMGEAR)	CXC1144
M 2	Motor Unit(-B)(ELEVATION)	CXC1145
M 3	Motor Unit(-A)(CRG)	CXC1143
VR1	Variable Resistor 10kΩ	CCW1023
	PU Unit(Service)(PX1)	CXX1568
M 901	Motor Unit(FLAP)	CXC1191

## 6. ADJUSTMENT

### 6.1 CONNECTION DIAGRAM



## 6.2 CD ADJUSTMENT

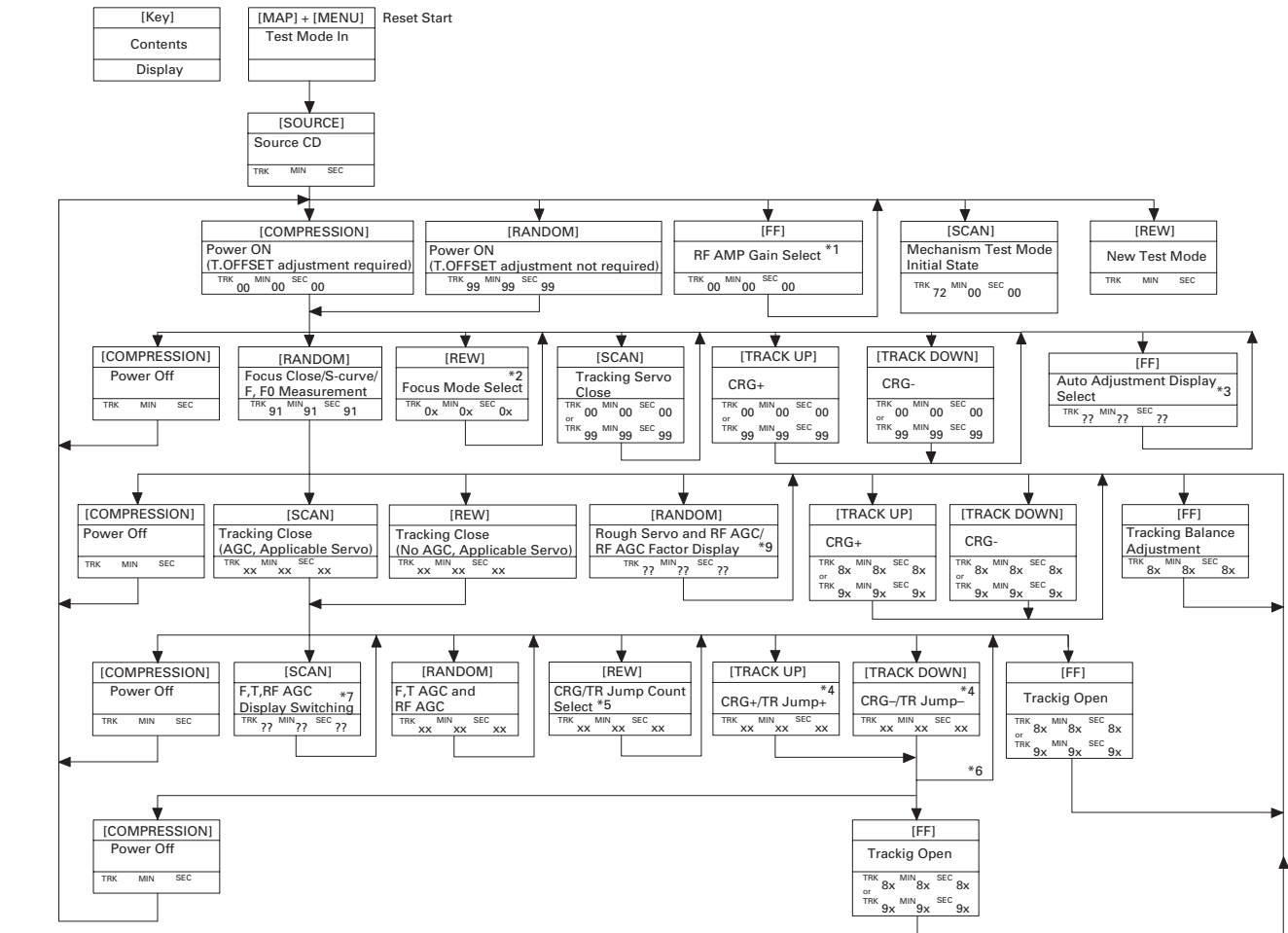
### 1) Precautions on Adjustment

- **Before you perform test mode of the unit, be sure to connect Navigation ECU to the unit.**
  - The unit employs a single voltage (+5V) for the regulator, thus the reference potential of the signal is REFO (approximately 2.5V) rather than GND. Inadvertent contact of REFO and GND during adjustment can result not only in disabling normal potential measurement but also in exposing the pickup to strong impacts due to malfunctioning of the servo. Therefore, you are requested to observe the following precautions.
  - Make sure that the negative probe of the measuring instrument is not connected to REFO or GND. Special care must be exercised so that the channel 1 negative probe may not be connected to the oscilloscope and the channel 2 negative probe to GND. Since the frame of the measuring instrument is usually at the same potential as the negative probe, the frame of the measuring instrument must be changed to floating status.  
When REFO is inadvertently connected to GND, you must immediately turn off the regulator or power supply.
  - The regulator must be turned off before mounting or dismounting filters or wiring materials.
  - You should not start adjustment or measurement immediately after the regulator is turned on. It is recommended to run the player for approximately one minute so that it may stabilize.
  - When the test mode is turned on, various protective functions from the software become unavailable. Thus, you must make sure that undesirable electric or mechanical shocks are not be given to the system.
  - This model employs a photo-transistor for detecting discs at their loading or ejection. Thus, if its outer case is removed during repair work and internal parts are exposed to light of strong intensity, malfunctions including the following can result:
    - \* The eject button becomes inoperable during play. Pressing the eject button does not eject a disc and play is continued.
    - \* Loading becomes unavailable.
- If a malfunction is recognized, appropriate remedial actions must be taken. Such actions include changing the light source position, changing the unit position and applying a cover to the photo-transistor.
- When you press the EJECT key to eject a disc, you must not touch any other key until the ejection is complete.
  - If you press the TRACK UP or TRACK DOWN for the focus search in the test mode, you must turn the power off immediately. (Otherwise, the lens will be forced to stick to the top or bottom, potentially resulting in the burning of the actuator.)

### 2) Description of the Test Mode

- **Turning on the Test Mode**  
Press the [MAP] and [MENU] keys simultaneously to turn on the ACC and the backup.
- **Ending the Test Mode**  
Apply the reset (the reset will be applied two minutes after the power is turned from off).
- **Operation of TR JUMPs (except 100TR) continues after your finger has left the key.** CRG, MOVE and 100TR JUMP are forced to the tracking close mode as soon as the key is released.
- **Turning the power on or off resets the JUMP MODE to the Single TR.**

## Flow Chart



\*1) TYP → -6dB → -12dB  
 TRK MIN SEC TRK MIN SEC TRK MIN SEC  
 00 00 00 06 06 06 12 12 12

\*2) Focus Close → S.Curve Check → LD Off  
 TRK MIN SEC TRK MIN SEC TRK MIN SEC  
 00 00 00 01 01 01 02 02 02  
 (TRK MIN SEC 99 99 99)

\*3) F.Offset Display → RF Offset Display → T.Bal Display → Rough Servo.  
 (F.Cancel value  
 = (Upper 8 bits of the setting (7F[H] to 80[H] + 128)/4  
 = 63[D] to 32[D] to 00[D]).

\*4) Single TR /4TR / 10TR / 32TR / 100TR

\*5) Single TR → 4 TR → 10 TR → 32 TR → 100 TR → CRG Move  
 9X(8X):91(81) 92(82) 93(83) 94(84) 95(85) 96(86)

\*6) Only for the CRG Move and 100TR modes

\*7) Track No. / Min / Sec → F.AGC Gain → T.AGC Gain → RF AGC Gain  
 (F.T. AGC Gain = (Current value/Initial value) x 20)

\*8) CRG motor voltage : 2 [ V ]

\*9) The first press displays the RF AGC coefficient. The second one or after performs the rough servo and RF AGC adjustments, and then displays the RF AGC coefficient.

- In all TR Jump modes except for 100TR, track jump operation continues even after the key is released.
- In the CRG Move and 100TR Jump modes, the tracking servo loop closes at the same time when the key is released.
- When the power is turned off and on, the RF AMP gain setting, and the auto adjustment values are reset to the Single TR (91), 0dB, and the factory setting respectively.

Note: Sound is unavailable even after the tracking has been closed  
 (this trouble results when the IC for the STS is not controlled in the test mode).

Note: When you pressed the [TRACK UP] or [TRACK DOWN] key during the Focus Search, you must turn the power off immediately  
 (otherwise, the lens can stick resulting in actuator damages).

[Key]	Operation	
	Test Mode	New Test Mode
[COMPRESSION]	Power ON/OFF	Error occurrence time/ Cause display switching
[TRACK UP]	CRG+/TR Jump+ (Toward outer perimeter)	TRACK UP
[TRACK DOWN]	CRG-/TR Jump- (Toward inner perimeter)	TRACK DOWN
[SCAN]	Tracking close and AGC and Applicable servo / AGC , AGC display switching	SCAN
[FF]	RF gain select / Offset adjustment display/ Tracking balance adjustment / Tracking open	FF
[RANDOM]	Focus Close, S.Curve / Rough Servo/ RF AGC / F,T, RF AGC	RANDOM
[REW]	Focus mode select / Tracking close / CRG-TR jump select	REW
[LOAD]	DISC load	DISC load
[EJECT]	DISC eject	DISC eject

Note) Before you perform test mode of the unit, be sure to  
 connect Navigation ECU to the unit.

## 6.3 CHECKING THE GRATING AFTER CHANGING THE PICKUP UNIT



### • Note :

The grating angle of the PU unit cannot be adjusted after the PU unit is changed. The PU unit in the CD mechanism module is adjusted on the production line to match the CD mechanism module and is thus the best adjusted PU unit for the CD mechanism module. Changing the PU unit is thus best considered as a last resort. However, if the PU unit must be changed, the grating should be checked using the procedure below.

### • Purpose :

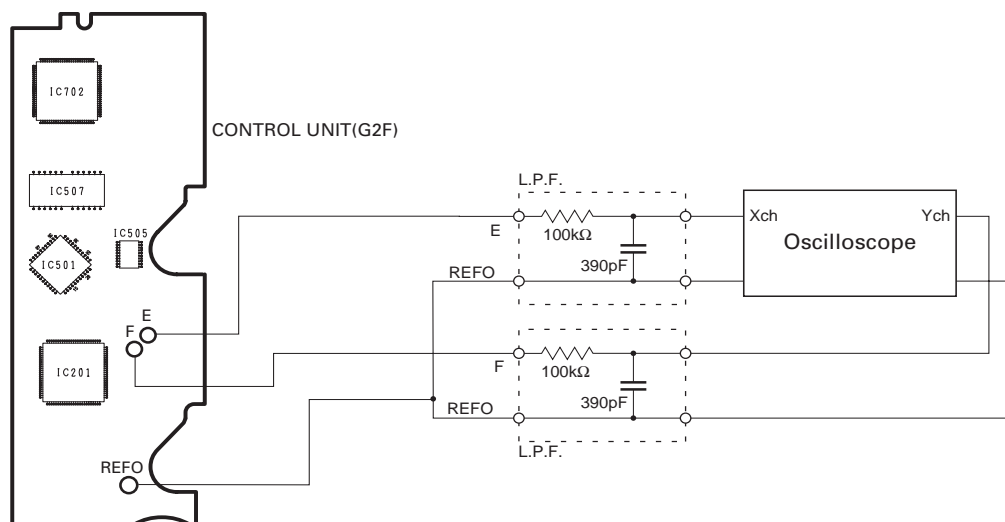
To check that the grating is within an acceptable range when the PU unit is changed.

### • Symptoms of Mal-adjustment :

If the grating is off by a large amount symptoms such as being unable to close tracking, being unable to perform track search operations, or taking a long time for track searching.

### • Method :

- |                       |                            |
|-----------------------|----------------------------|
| • Measuring Equipment | • Oscilloscope, Two L.P.F. |
| • Measuring Points    | • E, F, REFO               |
| • Disc                | • ABEX TCD-784             |
| • Mode                | • TEST MODE                |



### • Checking Procedure

1. In test mode, load the disc and switch the 5V regulator on.
2. Using the **TRACK UP** and **TRACK DOWN** buttons, move the PU unit to the innermost track.
3. Press key **RANDOM** to close focus, the display should read "91". Press key **FF** to implement the tracking balance adjustment the display should now read "81". Press key **RANDOM** 4 times. The display will change, returning to "81" on the fourth press.
4. As shown in the diagram above, monitor the LPF outputs using the oscilloscope and check that the phase difference is within  $75^\circ$ . Refer to the photographs supplied to determine the phase angle.
5. If the phase difference is determined to be greater than  $75^\circ$  try changing the PU unit to see if there is any improvement. If, after trying this a number of times, the grating angle does not become less than  $75^\circ$  then the mechanism should be judged to be at fault.

### • Note

Because of eccentricity in the disc and a slight misalignment of the clamping center the grating waveform may be seen to "wobble" ( the phase difference changes as the disc rotates). The angle specified above indicates the average angle.

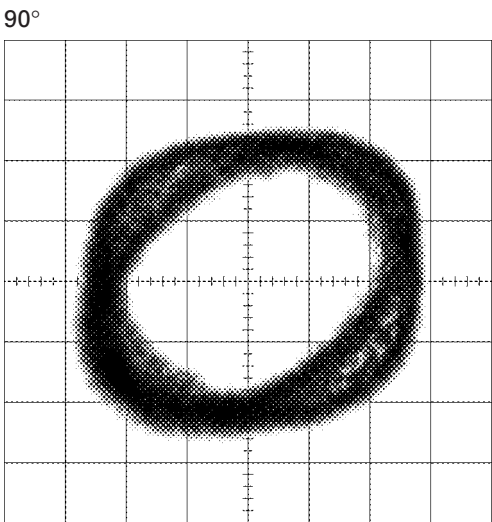
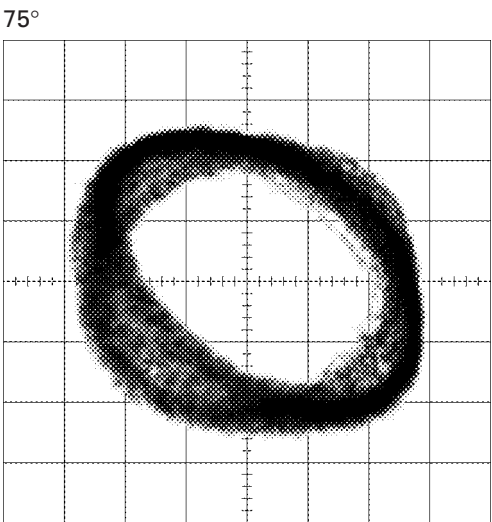
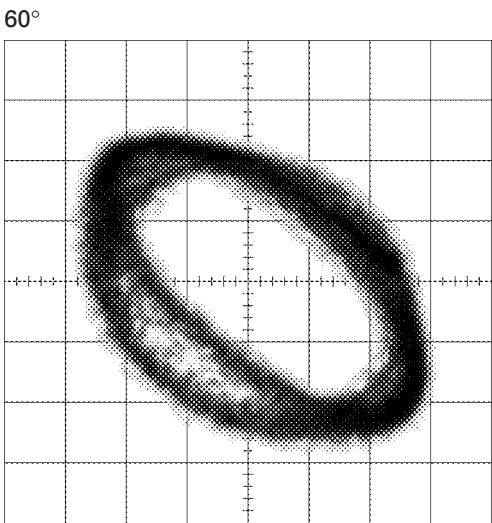
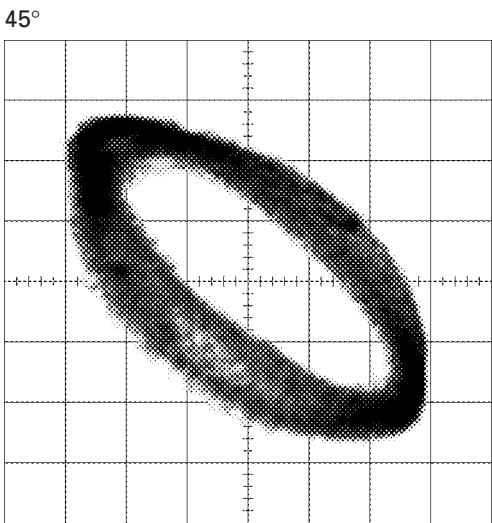
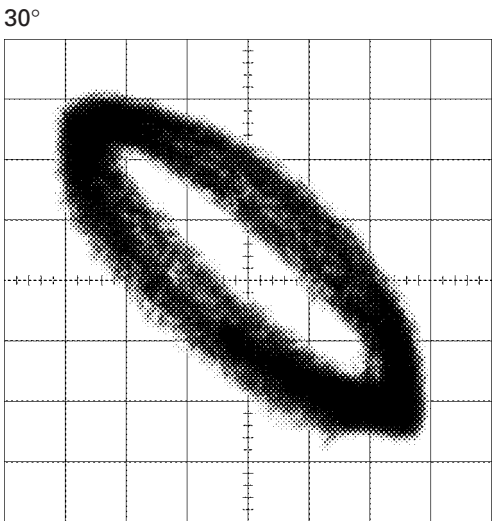
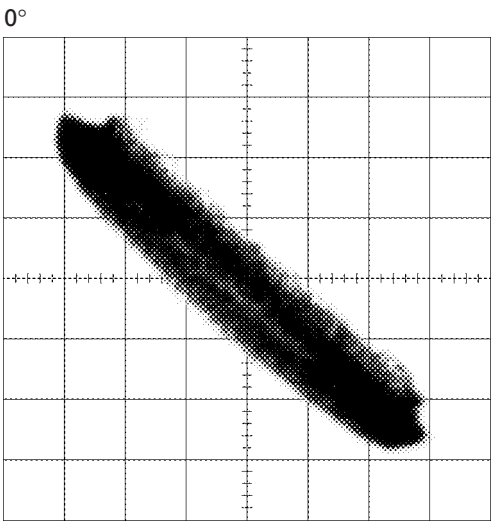
### • Hint

Reloading the disc changes the clamp position and may decrease the "wobble".



Grating waveform

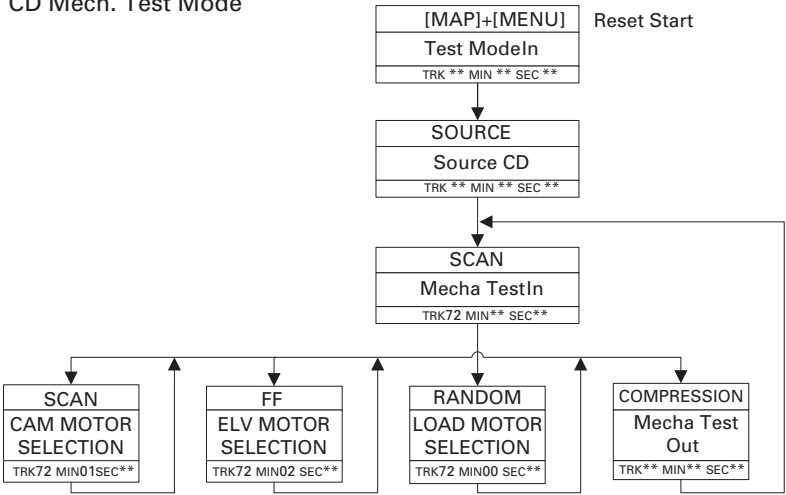
Ech → Xch 20mV/div, AC  
Fch → Ych 20mV/div, AC



6.4 TEST MODE

CD Mech. Test Mode

A



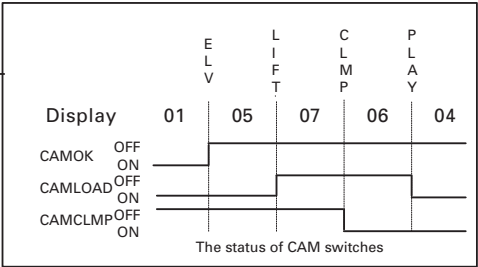
Note:  
The mechanical operations such as loading, ejection and disc change are controlled by the highly sophisticated method. Before entering this test mode, fully grasp how the mechanism is controlled, by referring to the mechanism operation flowchart.

[Key operations]  
Select the motor to be operated by using one of the following three keys: SCAN, FF, and RANDOM.  
To move the selected motor, use the "TRACK UP / TRACK DOWN" key.  
While the key is being pressed, the motor will continue to move.

B

1) To select the CAM motor, press the "SCAN" key.  
"TRACK UP" key: to move in the CAM PLAY direction  
"TRACK DOWN" key: to move in the CAM ELV direction

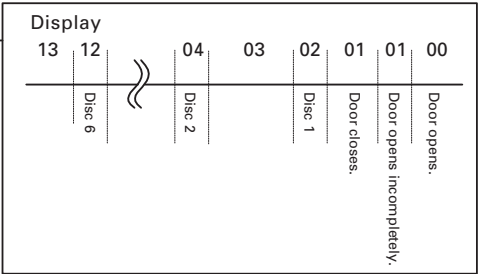
Notes:  
To protect the mechanism from unexpected damages, keep the following points in mind:  
1. Before moving the CAM motor from the ELV position to the LIFT position, be sure to move the ELV motor to select the disc 1 to 6.  
2. Before moving the CAM motor from the CLMP position to the LIFT position, be sure to select the SPDCL claws to release the disc clamp.



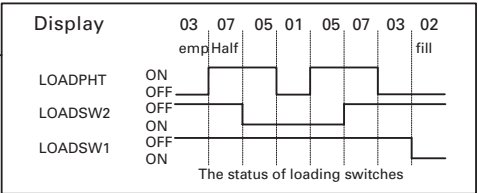
C

2) To select the ELV motor, press the "FF" key.  
"TRACK UP" key: to move in the ELV UP direction  
"TRACK DOWN" key: to move in the ELV DOWN direction

Note:  
Before moving the ELV motor, be sure to move the CAM motor to the ELV position or LIFT position first. If not, the mechanism may be damaged.  
When the CAM motor is set to the ELV position, do not move the ELV motor from the door open position to the door closed position.



3) To select the LOAD motor, press the "RANDOM" key.  
"TRACK UP" key: to load a disc.  
"TRACK DOWN" key: to eject the loaded disc.



D

## 6.5 ERROR CODE LIST

### ● Electricity

	Class	Contents	Description and cause
10	Electricity	Carriage home NG	CRG cannot move to the inner tracks. CRG cannot move from the inner tracks. →HOME SW defective, CRG movement failure
11	Electricity	Focus search NG	No focus →Disc loaded upside down, dirty discs loaded or excessive vibration applied
12	Electricity	Spindle lock NG Subcode NG RF AMP NG	No spindle lock. Wrong subcodes (unreadable) →Spindle failure, scratched or dirty discs loaded, excessive vibration applied Unwritten CD-R disc loaded. Disc loaded upside down. The optimum RF AMP gain cannot be obtained. →CD signal abnormal
17	Electricity	Setup NG	AGC protection does not function. Focus is easily unlocked. →Scratched or dirty discs loaded, excessive vibration applied
30	Electricity	Search time-out	Cannot reach the target address. →Carriage or tracking failure, scratched discs loaded.
	The third digit	The claw SW value when an error occurred: Bit 0: HOME, Bit 1: CLMP	
	The fourth digit	1: The number of the FG pulses is not within the allowable range. 0: The number of the FG pulses was satisfied with the spec at least once.	

### ● System

Upper two digits	Class	Contents	Description and cause
A0	System	Power NG	Power supply voltage (VD) abnormal →SW transistor failure. Abnormal power supply (connector failure)
A1	System	EREF NG	The elevation-position-detection reference voltage is deviated.
	The third and fourth digits	The motor control terminal output when an error occurred. (Bit 0 - 7) = (LO1, LO2, ELV1, ELV2, CG1, CG2, ELVCONT, LODCONT)	

● Mechanism 1: [2\* \*\*] Waiting for disc ejection.

Upper two digits	Class	Contents	Description and cause
20	Mechanism	Waiting for disc ejection.	A loaded disc is not taken out even when 30 seconds passed after forcible eject operation. Foreign substances, sensors failure, driving system failure
21	Mechanism	Waiting for disc ejection.	
22	Mechanism	Waiting for disc ejection.	
23	Mechanism	Waiting for disc ejection.	
24	Mechanism	Waiting for disc ejection.	
25	Mechanism	Waiting for disc ejection.	
26	Mechanism	Waiting for disc ejection.	
	The third digit	---	
	The fourth digit	The 3-bit value for the LOAD SW with forcible eject error: (Bit 0, Bit 1, Bit2) = (LOADSW2, LOADSW1, LOADPHT)	

● Mechanism 2: [5\* \*\*], [6\* \*\*], [7\* \*\*], [8\* \*\*] CAM operation NG

Upper two digits	Class	Contents	Description and cause
51	Mechanism	CAM Err	During TRAYUP, CAM motor FWD time-out error Time-out at the CAMCLMP ON waiting mode
52	Mechanism	CAM Err	During TRAYUP, CAM motor REV time-out error Time-out at the CAMCLMP OFF waiting mode
5A	Mechanism	CAM Err	During TRAYDN, CAM motor FWD time-out error Time-out at the CAMCLMP ON waiting mode
5B	Mechanism	CAM Err	During TRAYDN, CAM motor REV time-out error Time-out at the CAMLOAD OFF waiting mode
5E	Mechanism	CAM Err	During TRAYDN, CAM motor FWD time-out error Time-out at the CAMLOAD ON waiting mode
61	Mechanism	CAM Err	During CRGOUT, CAM motor FWD time-out error Time-out at the CAMLOAD OFF waiting mode
62	Mechanism	CAM Err	During CRGOUT, CAM motor REV time-out error Time-out at the CAMCLMP OFF waiting mode
64	Mechanism	CAM Err	During CRGOUT, CAMLOAD turns ON at the CAMCLMP OFF mode (mechanical stuck)
66	Mechanism	CAM Err	During CRGOUT, CAM motor REV time-out error Time-out at the CAMLOAD ON waiting mode
6A	Mechanism	CAM Err	During CRGIN, CAM motor FWD time-out error Time-out at the CAMCLMP ON waiting mode
6B	Mechanism	CAM Err	During CRGIN, CAM motor REV time-out error Time-out at the CAMCLMP OFF waiting mode
71	Mechanism	CAM Err	During ELVIN, CAM motor FWD time-out error Time-out at the CAMEOK OFF waiting mode
72	Mechanism	CAM Err	During ELVIN, CAM motor REV time-out error Time-out at the CAMEOK ON waiting mode

Upper two digits	Class	Contents	Description and cause
7A	Mechanism	CAM Err	During ELVOUT, CAM motor FWD time-out error Time-out at the CAMLOAD OFF waiting mode
7B	Mechanism	CAM Err	During ELVOUT, CAM motor REV time-out error Time-out at the CAMCLMP OFF waiting mode
7D	Mechanism	CAM Err	During ELVOUT, CAMLOAD turns ON at the CAMCLMP OFF mode (mechanical stuck).
7F	Mechanism	CAM Err	During ELVOUT, CAM motor REV time-out error Time-out at the CAMLOAD ON waiting mode
81	Mechanism	CAM Err	During EIN_EXP, CAM motor FWD time-out error Time-out at the CAMEOK OFF waiting mode
82	Mechanism	CAM Err	During EIN_EXP, CAM motor REV time-out error Time-out at the CAMEOK ON waiting mode
8A	Mechanism	CAM Err	During CIN_EXP, CAM motor FWD time-out error Time-out at the CAMCLMP ON waiting mode
8B	Mechanism	CAM Err	During CIN_EXP, CAM motor REV time-out error Time-out at the CAMCLMP OFF waiting mode
	The third digit	---	
	The fourth digit	CAMSW 3-bit value before retry (with the first error)(Bit0, Bit1, Bit2) = (CAMCLMP, CAMLOAD, CAMEOK)	

● Mechanism 3: [91 \*\*], [92 \*\*], [93 \*\*], [94 \*\*], [96 \*\*] Initializing errors  
For [90 \*\*], refer to (9) Mechanism 7.

Upper two digits	Class	Contents	Description and cause
91	Mechanism	CAMRST Err	At the start of the initializing operation, the CAM motor is not positioned correctly, but does not return to the correct position.
92	Mechanism	CAMRST Err	
93	Mechanism	CAMRST Err	
94	Mechanism	CAMRST Err	During initializing, spindle claws do not close.
96	Mechanism	CAMRST Err	At the start of the initializing operation, the CAM motor is not positioned correctly, but does not return to the correct position.
	The third digit	---	
	The fourth digit	---	

● Mechanism 4: [9A \*\*], [9B \*\*], [9C \*\*], [9D \*\*] Claw operation NG

Upper two digits	Class	Contents	Description and cause
9A	Mechanism	Claw Err	During spindle claw closing operation (DSKFREE), the claws do not close.
9B	Mechanism	Claw Err	During spindle claw opening operation (DSKLOCK), the claws do not open.
9C	Mechanism	Claw Err	During spindle claw closing operation for releasing the shipping mode (CLWCLSE), the claws do not close.
9D	Mechanism	Claw Err	During spindle claw opening operation for setting the shipping mode (CLWOPEN), the claws do not open.
	The third digit	CAMSW 3-bit value with an claw operation error(Bit 0, Bit 1, Bit 2) = (CAMCLMP, CAMLOAD, CAMEOK)	
	The fourth digit	Claw SW value before the claw operation starts Bit 0: HOME, Bit 1: CLMP	

● Mechanism 5: [B\* \*\*] Disc change (tray selection) NG Upper 2 digits

Upper two digits	Class	Contents	Description and cause
B1	Mechanism	DISCSEL Err	The elevation does not move in the UP direction or stops.
B2	Mechanism	DISCSEL Err	The elevation does not move in the DOWN direction or stops.
B3	Mechanism	DISCSEL Err	The carriage cannot reach the target tray.
B6	Mechanism	DISCSEL Err	The carriage mechanism passes the target tray.
	The third digit	Target Disc No.	
	The fourth digit	EVL Err stop position before retry	

● Mechanism 6:

[C\* \*\*] The tray does not move up to the eject/insert position (elevation movement including shutter opening).

[D\* \*\*] The tray does not move down from the eject/insert position to the home position (elevation movement including shutter closing).

Upper two digits	Class	Contents	Description and cause
C1	Mechanism	LIFT Err	During LIFTUP, the shutter does not open completely.
C2	Mechanism	LIFT Err	
C3	Mechanism	LIFT Err	
C6	Mechanism	LIFT Err	During LIFTUP, abnormal conditions occurred.
D1	Mechanism	LIFT Err	
D2	Mechanism	LIFT Err	
D3	Mechanism	LIFT Err	During LIFTDN, abnormal conditions occurred.
D4	Mechanism	LIFT Err	The elevation does not move in the DOWN direction or stops.
D6	Mechanism	LIFT Err	During LIFTDN, the carriage mechanism cannot reach the target tray.
D7	Mechanism	LIFT Err	During LIFTDN, foreign substances were detected around the slot.
	The third digit	The current Disc No.	
	The fourth digit	EVL err stop position before retry	

● Mechanism 7: [E (F)\* \*\*]

Upper two digits	Class	Contents	Description and cause
90	Mechanism	LOAD/EJECT Err	After forcible eject, the shutter does not open or close even with retry.
E0	Mechanism	LOAD/EJECT Err	
E2	Mechanism	LOAD/EJECT Err	
E6	Mechanism	LOAD/EJECT Err	
EB	Mechanism	LOAD/EJECT Err	
ED	Mechanism	LOAD/EJECT Err	
F0	Mechanism	LOAD/EJECT Err	
F1	Mechanism	LOAD/EJECT Err	
F2	Mechanism	LOAD/EJECT Err	
F3	Mechanism	LOAD/EJECT Err	
F4	Mechanism	LOAD/EJECT Err	
F5	Mechanism	LOAD/EJECT Err	
F6	Mechanism	LOAD/EJECT Err	
F7	Mechanism	LOAD/EJECT Err	
FB	Mechanism	LOAD/EJECT Err	
	The third digit	---	
	The fourth digit	---	

Code	Meaning
0	Door opens.
1	Door opens incompletely.
E	Door closes.
2	Disc 1: within OK range
3	
4	Disc 2: within OK range
5	
6	Disc 3: within OK range
7	
8	Disc 4: within OK range
9	
A	Disc 5: within OK range
B	
C	Disc 6: within OK range
D	

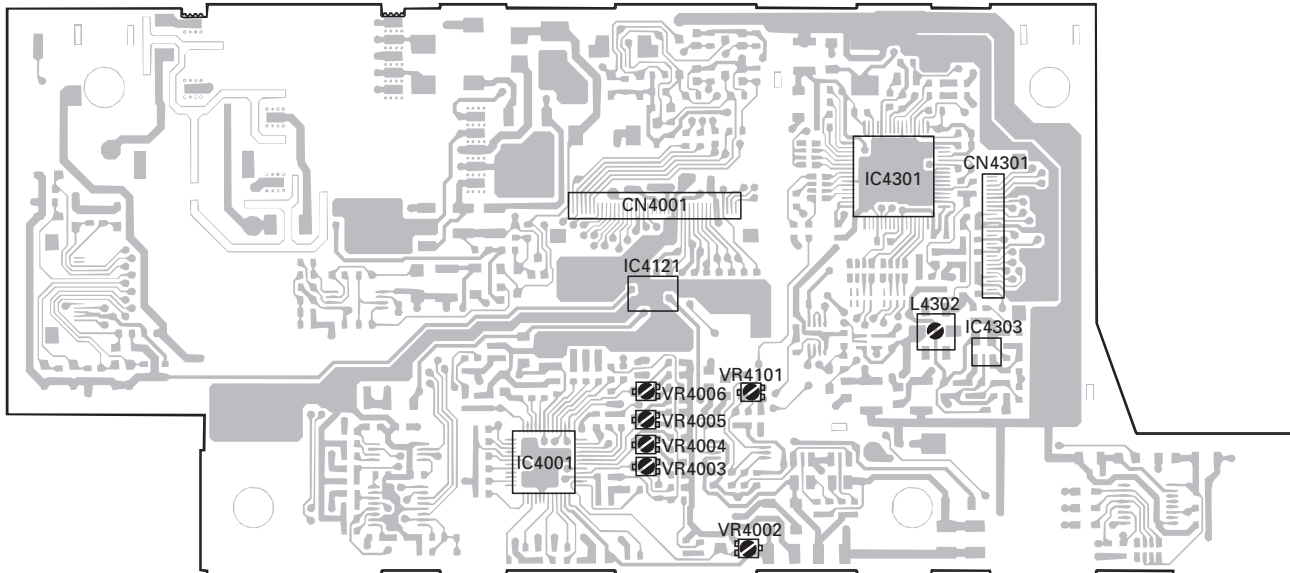
## 6.6 MODULE UNIT ADJUSTMENT



● Adjustment point

A

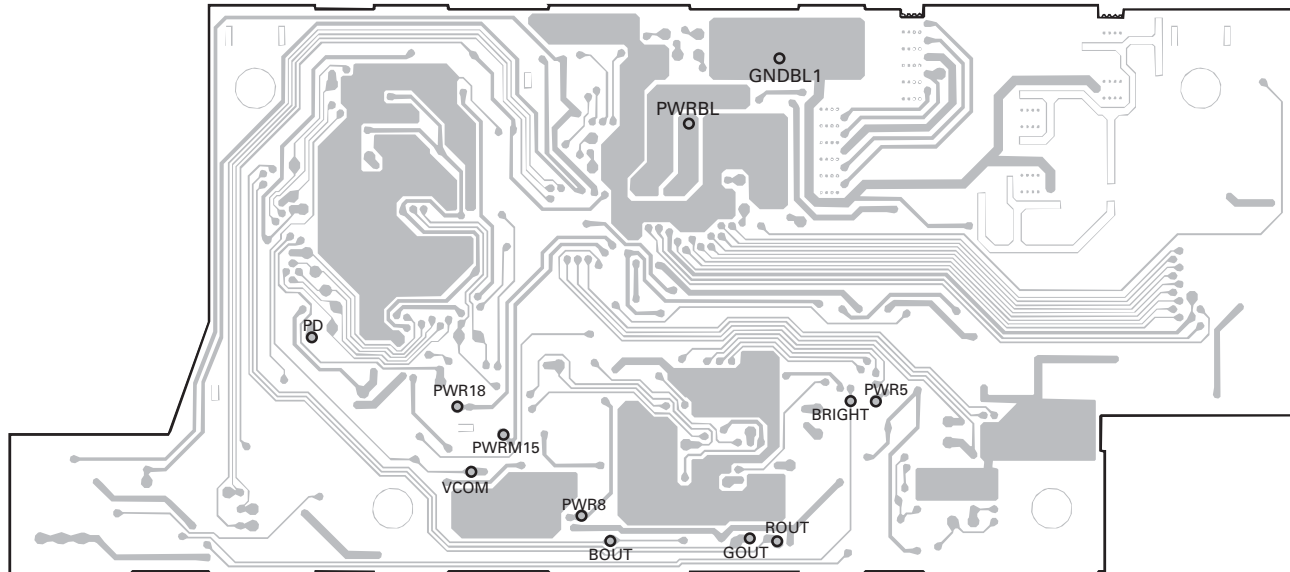
MODULE UNIT (SIDE A)



B

● Test point


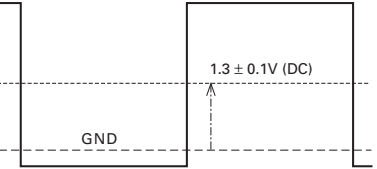
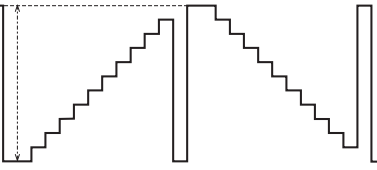
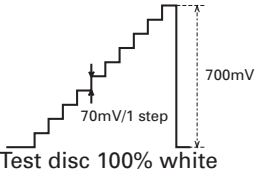
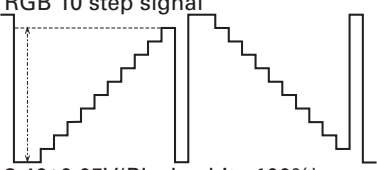
MODULE UNIT (SIDE B)

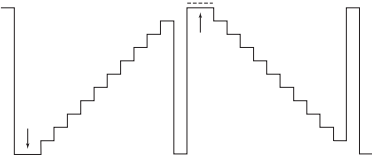
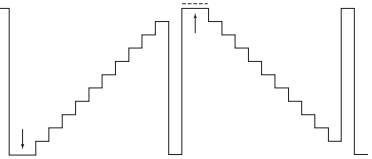



C

D



No.	Adjustment item	VSW	Measurement Point	Adjustment Point	Adjustment Content	Note
1	5V supply		TP PWR5 (CN4001 pin 27)		5.0V±0.1V DC	
2	8V supply		TP PWR8 (CN4001 pin 28)		7.5V±0.3V DC	
3	18V supply		TP PWR18 (CN4001 pin 29)		18.5V±0.7V DC	
4	-15V supply		TP PWRM15 (CN4001 pin 30)		-15.5V±0.7V DC	
5	PWRBL supply		TP PWRBL (CN4001 pin 21, 22)		8.3V±0.2V DC	Measure the potential difference between TP and GND <sub>BL1</sub>
6	BRIGHT setting	H	TP BRIGHT (IC4121 pin 6)	IC4121 A02	65h Setting(1.99V)	User adjustment "CONTRAST=0" is also possible
7	BRIGHT confirmation	H	TP BRIGHT (IC4121 pin 6)		1.99V±0.05V DC	
8	Free-run PD voltage confirmation		TP PD (IC4303 pin 4)		No synchronizing signal input Conform the voltage of TP PD	
9	PD voltage adjustment		TP PD (IC4303 pin 4)	L4302	Synchronizing signal input (The signal for checker) External video input or TVRF input Voltage checked in No.8 ± 0.01V DC	
10	COM amp rough adjustment	H	TP VCOM (CN4301 pin 17)	VR4006	 6.30V±0.2V	
11	Vcom_DC rough adjustment	H	TP VCOM (CN4301 pin 17)	VR4101	 1.3 ± 0.1V (DC) GND	Measure DC value of Vcom center voltage
12	RGB amp	H	TP GOUT (CN4301 pin 27)	VR4003	RGB 10 step signal  4.00±0.05V(Black-black of next line)	RGB 10 step signal  700mV 70mV/1 step Test disc 100% white Diagnostic mode 100% white is also possible
13	Gamma 2	H	TP GOUT (CN4301 pin 27)	VR4002	RGB 10 step signal  3.40±0.05V(Black-white 100%)	

No.	Adjustment item	VSW	Measurement Point	Adjustment Point	Adjustment Content	Note
14	B sub brightness adjustment	H	TP GOUT (CN4301 pin 27) and TP BOUT (CN4301 pin 26)	VR4004	RGB 10 step signal  Adjust the black level of G and B waveform	
15	R sub brightness adjustment	H	TP GOUT (CN4301 pin 27) and TP ROUT (CN4301 pin 28)	VR4005	RGB 10 step signal  Adjust the black level of G and R waveform	
16	COM amp	H	TP VCOM (CN4301 pin 17)	VR4006	 $6.30V \pm 0.05V$	
17	Aging				Input all screen white signals (or animation) Leave 30 minutes or more operation mode	
18	Flicker adjustment		Display	VR4101	Input the signal that black signal and white signal reverses line-by-line (RGB) Adjust so that display flicker is minimum	

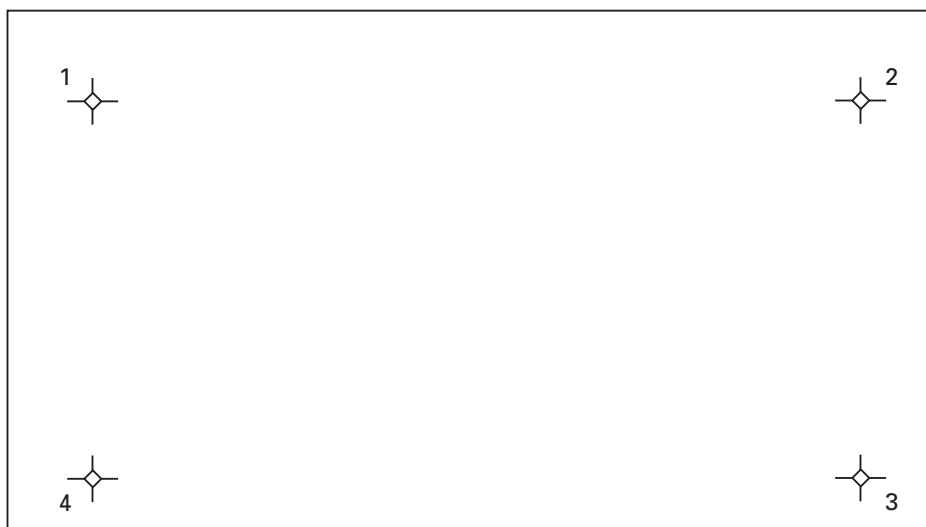
## 6.7 TOUCH PANEL CALIBRATION

### ● Calibrate the touch panel in the following cases:

- After changing the EEPROM(IC601).
- When the touch screen is out of alignment.
- When the EEPROM(IC601) data is erased.

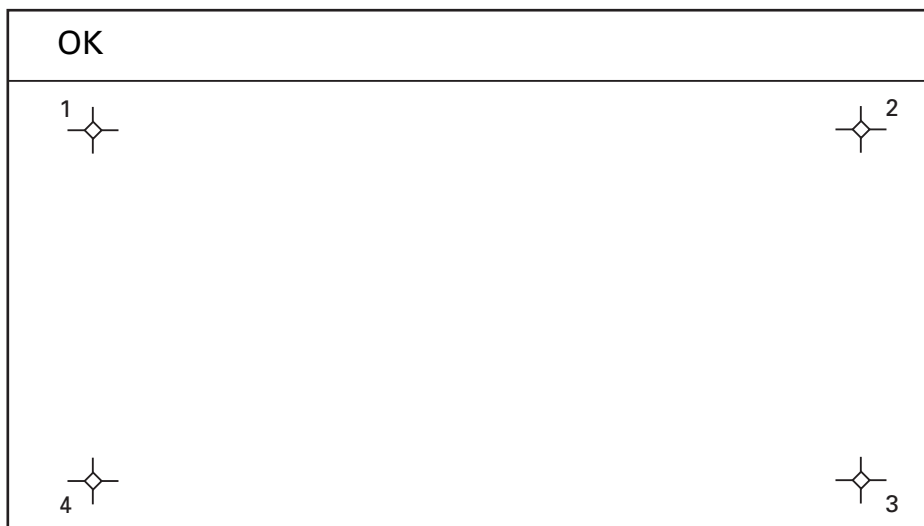
### ● Turning on the Calibration Mode

Press the MAP, DEST and MENU buttons simulataneously turn on the ACC.



### ● Calibration

Using the stylus pen, touch the point indicated in each corner of the screen in the order shown. "OK" is displayed at the top of the screen to indicate that the touch screen has been calibrated, then normal operation will resume.



### ● Verification

To check the calibration, press "AM", then "Sound" then "Bass/Treble" to select the Audio Adjustment mode, then press "0" for both "Bass" and "Treble". The button display should be displayed reversed.

### ● Storing the calibration data

Switch ACC ON to OFF and leave OFF for at least than 10 seconds. During this time, do not switch off the backup power.

## 7. GENERAL INFORMATION

### 7.1 DIAGNOSIS

#### 7.1.1 DISASSEMBLY

##### ● Removing the Grille Assy

1. Insert a screwdriver into the hole on the back of the unit and press it straight in the direction of the arrow as shown in Fig. 1.  
If you insert the screwdriver at an angle at the moment, you may damage some parts inside.  
Be sure to insert the screwdriver horizontally to the product.
2. Press and open the Grille Assy to the maximum extent with your hands. (Fig.1)
3. Remove the two screws. (Fig.2)
4. Unlock the connector with a standard tip screwdriver and remove the Grille Assy. (Fig.3)

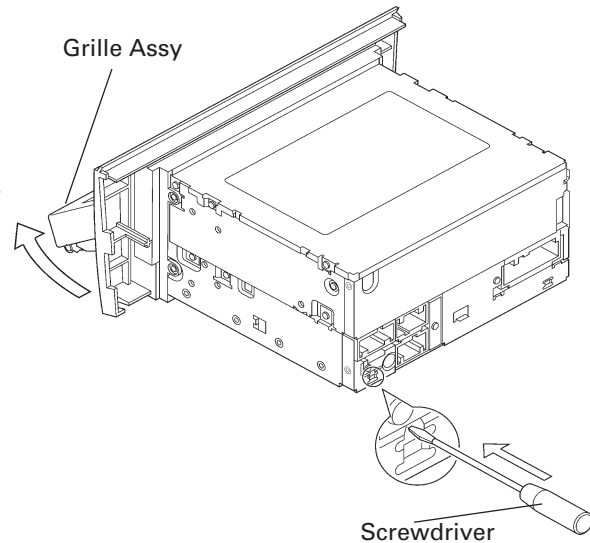


Fig.1

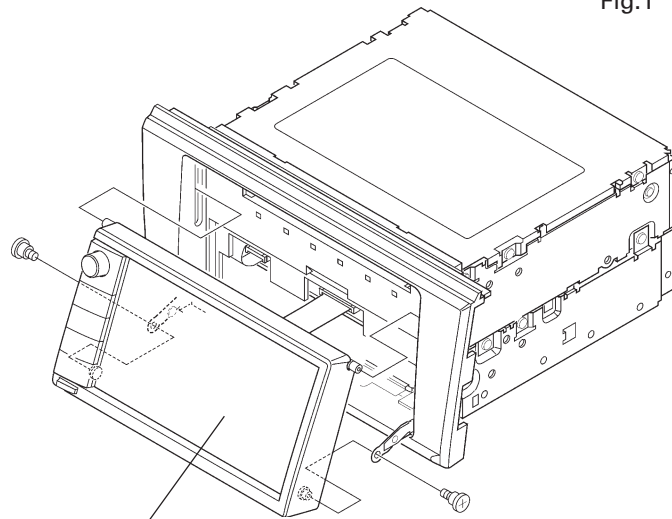


Fig.2

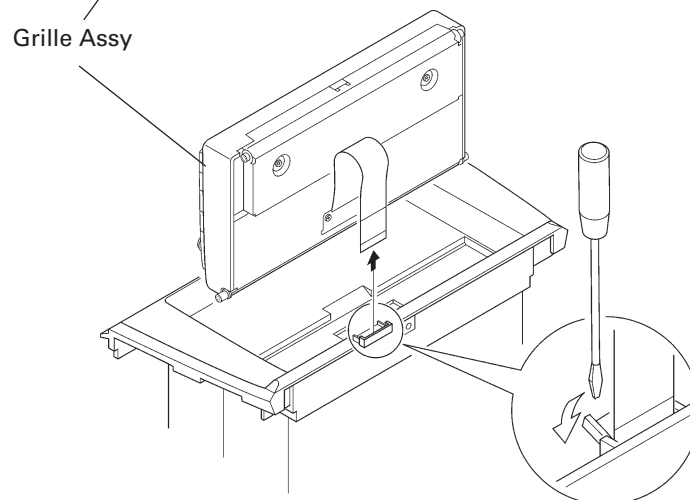


Fig.3

### ● Removing the Case(Fig.4)

1. Remove the four screws A and then remove the Case.

### ● Removing the Panel Assy(Fig.4)

1. Disconnect the connector.
2. Remove the four screws B and then remove the Panel Assy.

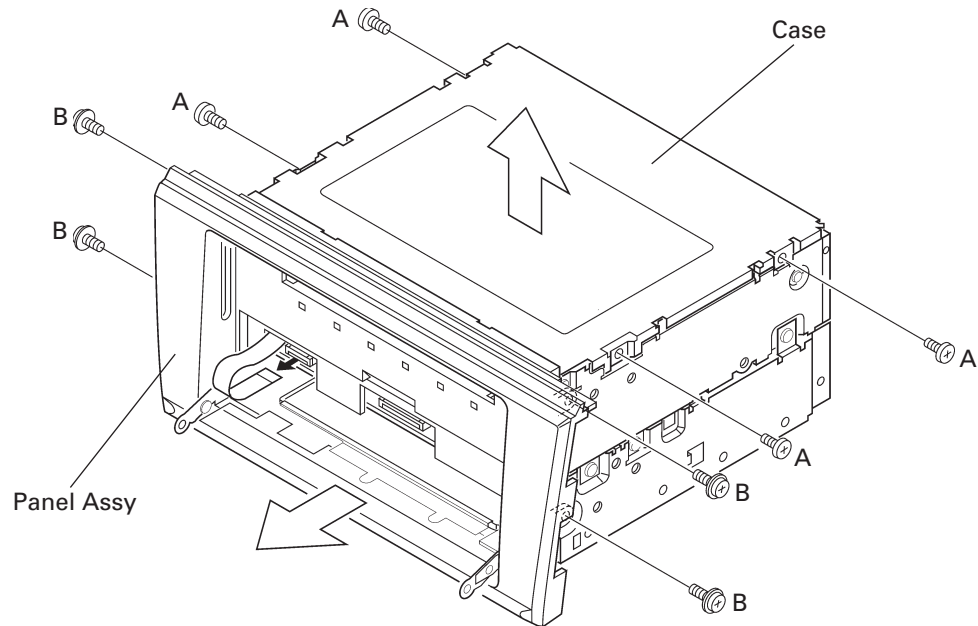


Fig.4

### ● Removing the CD Mechanism Module(Fig.5)

1. Remove the four screws.
2. Disconnect the connector and then remove the CD Mechanism Module.

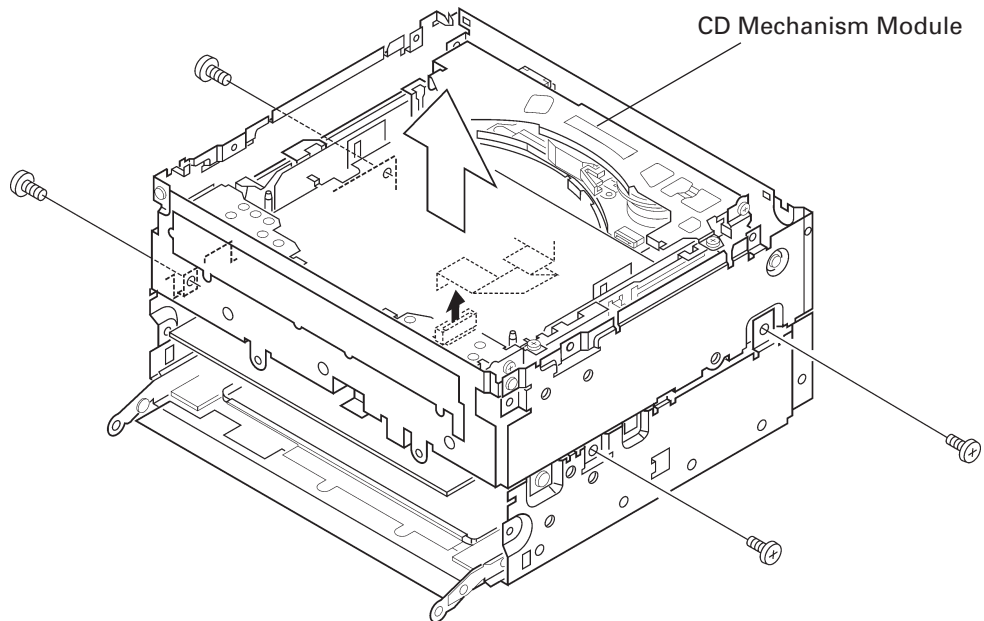


Fig.5

### ● Removing the Mechanism Unit(Fig.6)

1. Remove the two springs A and two springs B from the hook.
2. Remove the nine screws A and then remove the holder.
3. Remove the four screws B and then remove the two brackets from chassis.
4. Remove the four dampers and then remove the Mechanism Unit

### ● Removing the Control Unit(Fig.6)

1. Apply shorting solder to the PU flexible cable.
2. Disconnect the connector.
3. Remove the two screws C.
4. Remove the Control Unit(G2F).

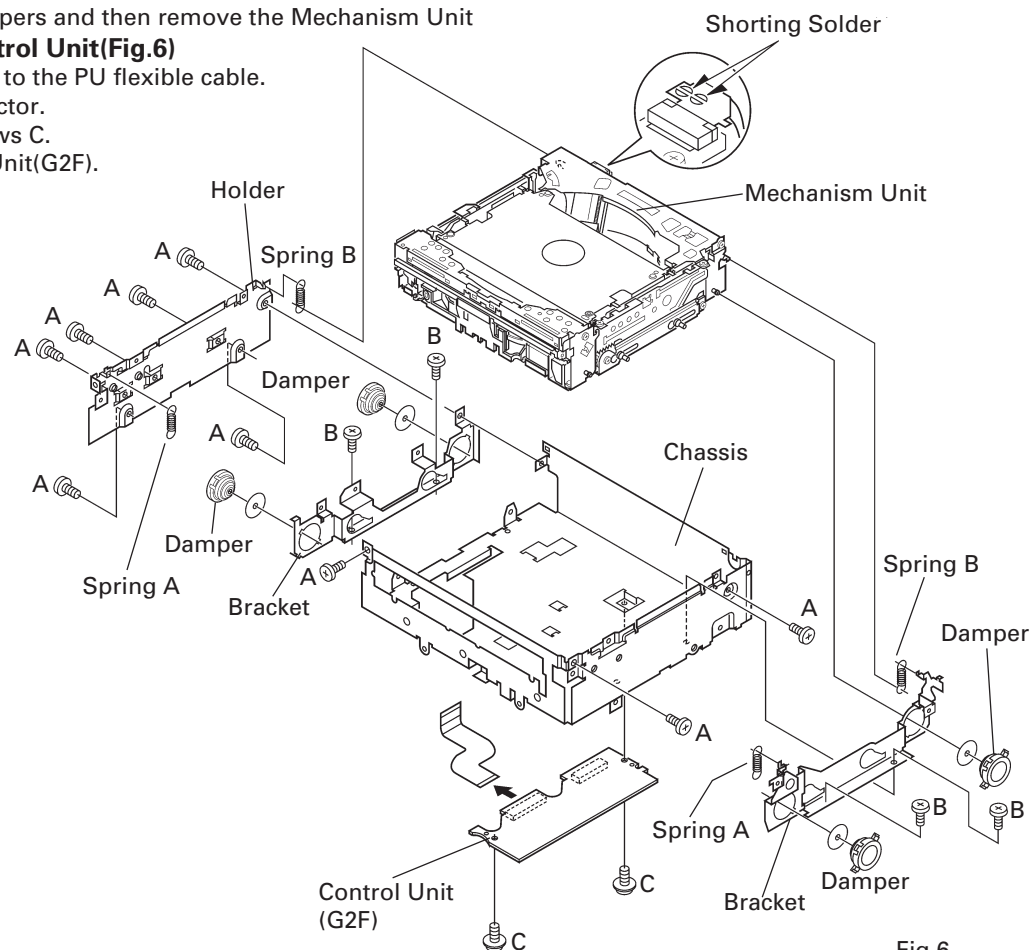


Fig.6

### ● Removing the Connector PCB(Fig.7)

1. Remove the two screws A and then remove the Connector PCB.

### ● Removing the Drive Mechanism Unit(Fig.7)

1. Disconnect the connector.
2. Remove the two screws B and then remove the Drive Mechanism Unit.

### ● Removing the Tuner Audio Unit(Fig.7)

1. Remove the two screws C, two screws D and screw E.
2. Unbend the tab indicated by arrow and then remove the Tuner Audio Unit.

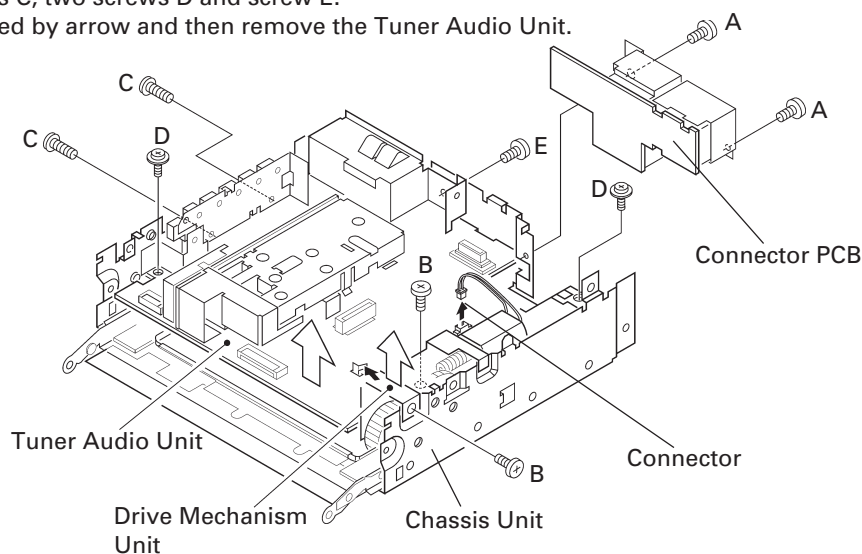


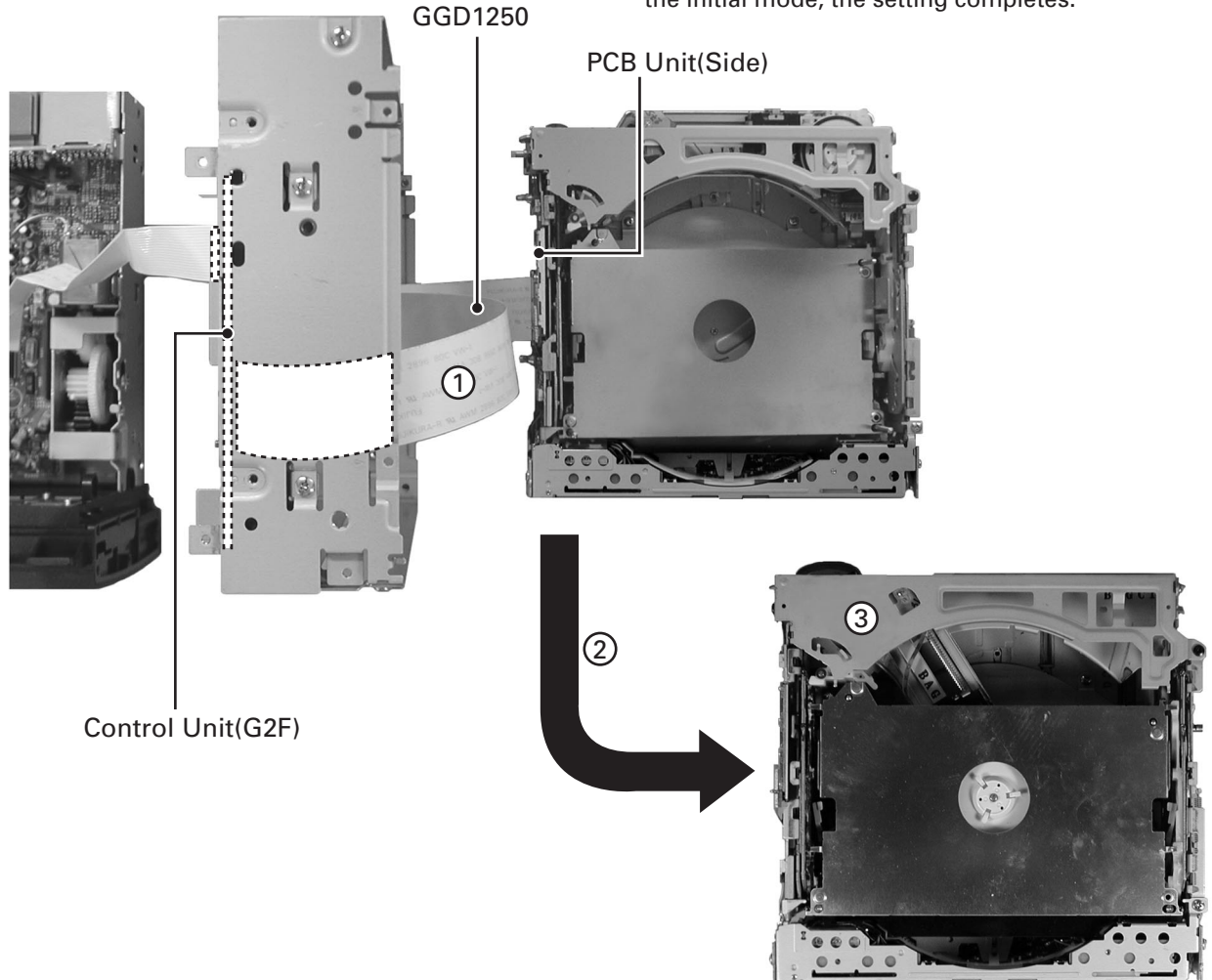
Fig.7

### ● Cautions on replacing the CD mechanism unit

The CD mechanism units available as service parts have been set in the shipment mode at the factory. Before mounting it on the product to be serviced, be sure to apply the power to a CD mechanism to put it into the initial mode, where the carriage mech assy stays at the disc clamp position, in accordance with the following method:

#### <Initial mode setting method>

1. Keep a CD mechanism unit out of the product to be serviced as shown below. Connect the 50-pin connector of the control unit (G2F) in the product and the 50-pin connector of the PCB unit (Side) in the CD mechanism by using the extension cable (GGD1250).
2. Apply the power (+14V) to the product to move the CD mechanism until it enters the initial mode and stops. (Operating time: about 30 seconds)
3. When it is confirmed that the CD mechanism stops in the initial mode, the setting completes.



### ● Removing the PU Unit(PX1)

1. Set the mechanism to the shipment mode.
2. Remove the two screws A and two screws B.
3. Remove the Frame.

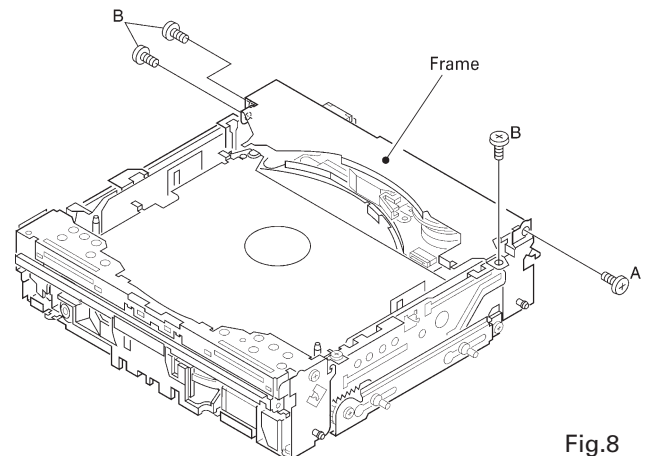


Fig.8

4. Apply shorting solder to the PU flexible cable before disconnecting it from the connector CN12.
5. Disconnect the flexible cable from the connector CN12, and remove the flexible cable Holder.
6. Remove the washer and Arm. (Be careful not to lose the spring B.)
7. Remove the screw, spring A, and Collar.
8. Remove the Carriage Mech. Assy.

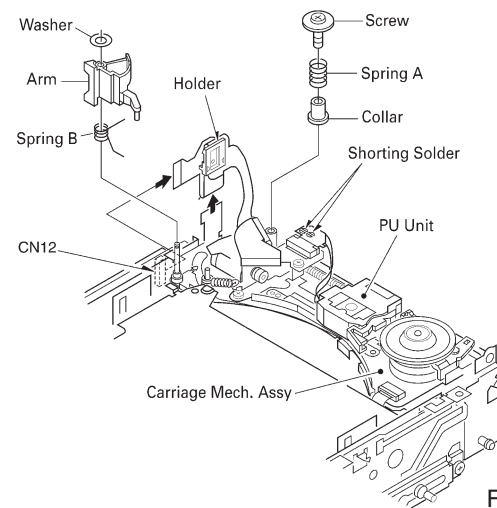


Fig.9

9. Apply shorting solder to the PU flexible cable before disconnecting it from the Connector.
10. Disconnect the PU flexible cable from the Connector.
11. Move the PU Unit to the left side slightly by turning the Gear.
12. Pull out the spindle motor Support Wheel Unit upwards to remove it.
13. Remove the Spring.
14. Slide the holder to make it easier to remove the Screw Unit.

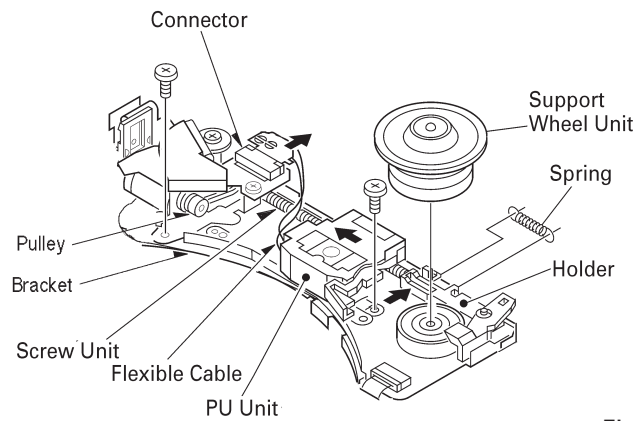


Fig.10

15. While pressing the shaft holder in the direction shown by the black arrow in the right figure, remove the PU Unit together with the Screw Unit.

Note:

To assemble the PU Unit, insert the Spring on the PU rear between the PU Unit and the Guide first.

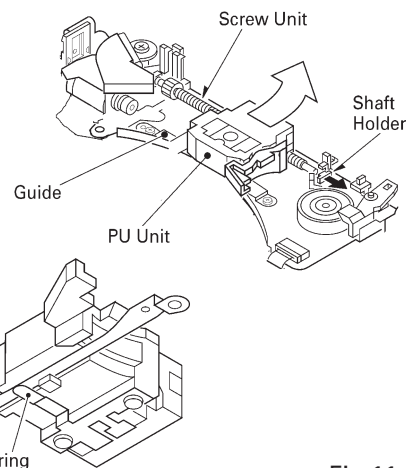
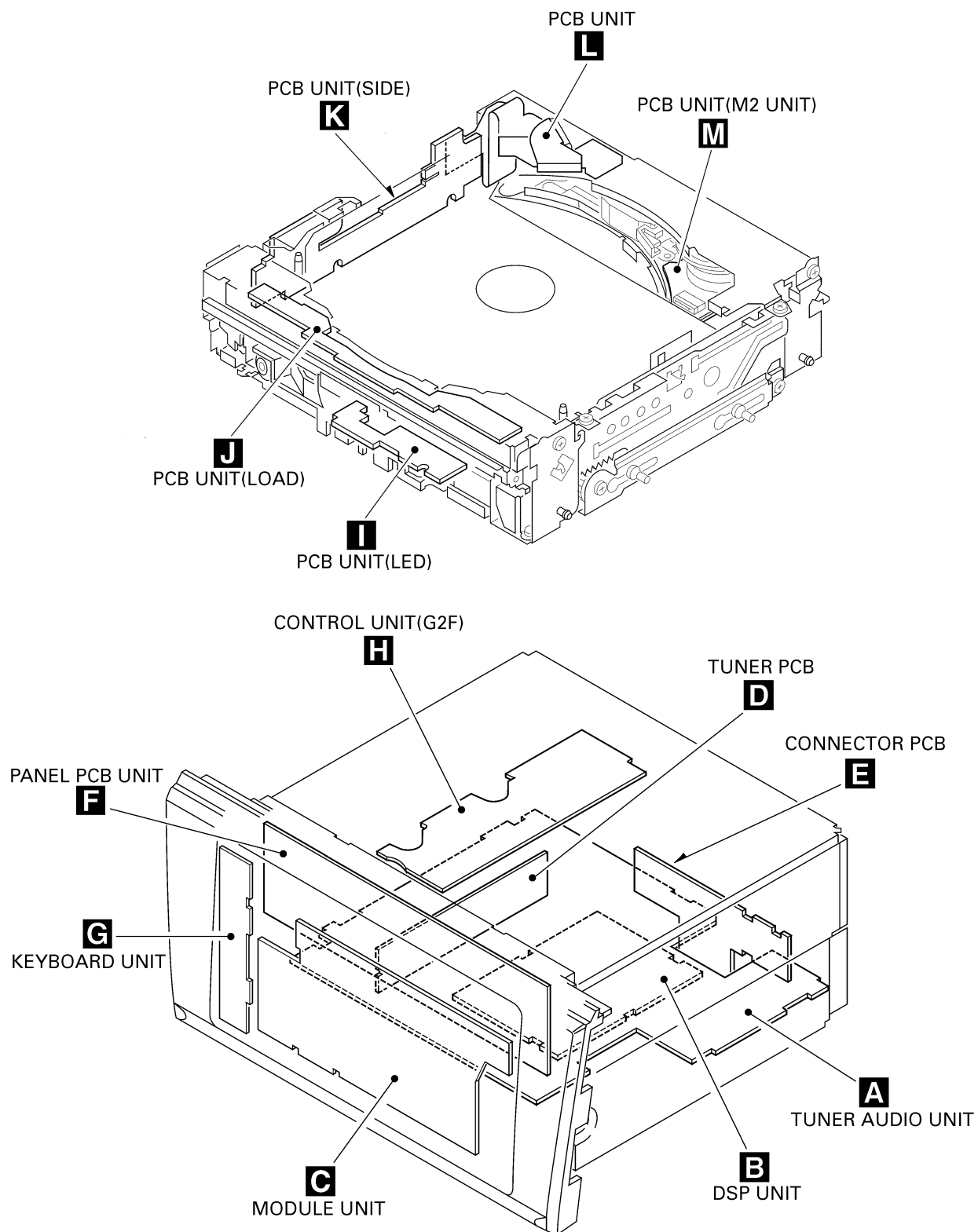


Fig.11



## 7.1.2 PCB LOCATIONS

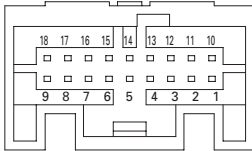


## 7.1.3 CONNECTOR FUNCTION DESCRIPTION

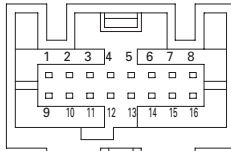
A

PIN NO.	FUNCTION
1	LF+
2	RF+
3	LR+
4	RR+
5	NC
6	NC
7	SUBWOOF+
8	NC
9	ENABLE/CLD
10	LF-
12	RF-
12	LR-
13	RR-
14	NC
15	NC
16	SUBWOOF-
17	AUDIO SHIELD GND
18	ENABLE/CLD1

PIN NO.	FUNCTION
1	AUDIO L+
2	AUDIO L-
3	AUDIO-SHIELD
4	MONO+
5	MONO-
6	ASYSON
7	ACP A
8	ACP B
9	AUDIO R+
10	AUDIO R-
11	NC
12	NC
13	NC
14	NC
15	NC
16	NC



6ch AMPLIFIER



CD DJ, RSE or TCU

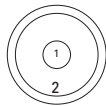
B

FM/AM ANTENNA

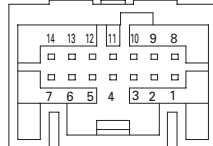
NAVIGATION

POWER SUPPLY

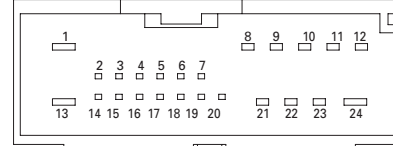
C



PIN NO.	FUNCTION
1	ANTENNA
2	SHIELD



PIN NO.	FUNCTION
1	RGB R
2	RGB G
3	RETURN
4	NC
5	VOICE+
6	CLOCK ON
7	CAN A
8	RGB B
9	SYNC
10	NC
11	NC
12	VOICE-
13	NC
14	CAN B



PIN NO.	FUNCTION	PIN NO.	FUNCTION
1	BACKUP	13	POWER_GND
2	DELAY/ACC	14	NC
3	PWM+	15	START
4	PWM-	16	NC
5	IP OPEN+	17	NC
6	IP OPEN-	18	SWC+
7	PTA	19	SWC-
8	NC	20	REVERSE
9	NC	21	NC
10	NC	22	NC
11	NC	23	NC
12	NC	24	RADIO_GND

D

## 7.2 IC

### ● Pin Functions (PD5904D)

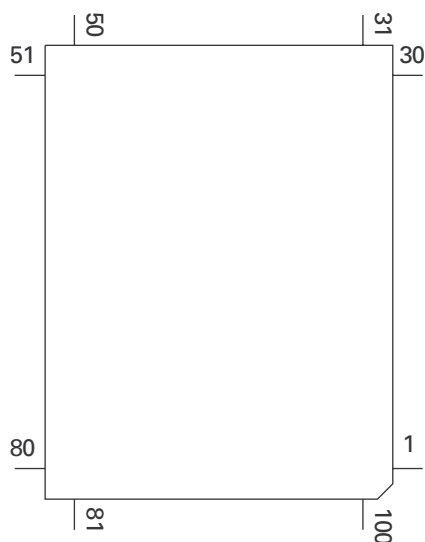
Pin No.	Pin Name	I/O	Function and Operation
1	CTX	O	CAN communication output
2	CRX	I	CAN communication input
3	PWMIN	I	ILM PWM input
4	ILMOUT	O	ILM D/A output
5	PDO	O	Tuner : PLL/ DA IC data output
6	PDI	I	Tuner : PLL Data input
7	PCK	O	Tuner : PLL/DA IC clock output
8	BYTE		Not used
9	CNVSS		GND
10	SCLKIN	I	Sub clock input
11	SCLKOUT	O	Sub clock output
12	RESET	I	Reset input
13	XOUT	O	Crystal oscillator connection pin
14	VSS		GND
15	XIN	I	Crystal oscillator connection pin
16	VCC	I	Power supply
17	NMI	I	Not used
18	RCK	I	RBDS : Clock input
19	ILMINT	I	Illumination interrupt input
20	ROTINT	I	Rotary encoder interrupt input
21	BSENS	I	Back up sense input
22	OPENS $\overline{W}$	I	OPEN switch input
23	ASENS	I	ACC sense input
24	HOMES $\overline{W}$	I	Home switch input
25	IOPEN	I	IP open input
26	BEEP	O	Beep output
27	CDSRQ	I	F-BUS : Communication request input
28	ECLK	O	Electronic volume / DSP clock output
29	EDTIN	I	DSP data Input
30	EDT	O	Electronic volume / DSP data output
31	ATXD	O	ACP-BUS: ACP data output
32	ARXD	I	ACP-BUS: ACP data input
33	LCK	O	Expander IC : data latch output
34	EVCE	O	Evol chip enable output
35	MOSI	O	F-BUS : Bus data output
36	MISO	I	F-BUS : Bus data input
37	SCK	O	F-BUS : Bus clock output
38	CSCD	O	F-BUS : Communication status output
39	EPCE	O	Diag EPROM CE (CLKout) output
40	BRST	O	F-BUS : BUS reset output
41	CLIPIN1	I	Clip detector input
42	DSPCS	O	DSP : DSP IC chip select output
43	DSPRST	O	DSP : DSP IC reset output
44	DSPACK	I	DSP : DSP IC acknowledge input
45	IFOK	I	DSP : DSP internal flag input
46	DSPERR	I	DSP : DSP internal error input
47	CLIPIN	I	Clip detector input
48	OE	O	Expander output enable output
49	ROMCK	O	ROM1 / Expander clock output
50	ROMDATA	O	ROM1 / Expander data I/O output
51	DRST	O	RBDS : IC reset output
52	REVICE	I	RBDS : Receive input
53	RDT	I	RBDS : RBDS data input
54	RDSLK	I	RBDS : RDSLK input
55	ST	I	Tuner : Stereo input
56	LOCL	O	Tuner : Local L output
57	PLLCE2	O	Tuner : PLL chip enable output 2

Pin No.	Pin Name	I/O	Function and Operation
58	SD	I	Tuner : SD input
59	PLLCE	O	Tuner : PLL chip enable output 1
60	PSSENS	I	Photo sense input
61	SYSPWR	O	System power output
62	VCC		Power supply
63	MUTE	O	System mute output
64	VSS		GND
65	AMPPWR	O	Amp power output
66	DSPCS2	O	DSP : DSP IC 2 chip select output
67	RPAIN	I	Parking aid input
68	SWVDD	O	Power output
69	DALD	O	DA IC load output
70	TESTIN	I	Chip test mode input
71	NC		Not used
72	ASYSON	O	ACP-BUS: power output
73	WAKEUP	I	Wake Up key sense input
74	PTAIN	I	PTA interrupt input
75	ACPINT	I	ACP-BUS: ACP Bus interrupt input
76	CLKWK	O	Wake Up for clock display output
77-80	KDT3-KDT0	I	Key data input
81	YDT1	O	Touch Panel : Y data output 1
82	YDT0	O	Touch Panel : Y data output 0
83	XDT1	O	Touch Panel : X data output 1
84	XDT0	O	Touch Panel : X data output 0
85-88	KST3-KST0	O	Key strove output
89	ROTIN1	I	Rotary encoder pulse input 1
90	ROTIN0	I	Rotary encoder pulse input 0
91	MODEL	I	Distinction of vehicle input
92	TPADIN1	I	Touch Panel : AD input 1
93	TPADIN0	I	Touch Panel : AD input 0
94	SWCIN	I	SWC input
95	ILMI	I	Illumination sense input
96	AVSS		A/D converter ground
97	SL	I	Tuner SL Level input
98	VREF		A/D converter reference voltage
99	AVPP		Not used
100	CANPWR	O	CAN-BUS : Power output

\* PD5904C

IC's marked by \* are MOS type.

Be careful in handling them because they are very liable to be damaged by electrostatic induction.



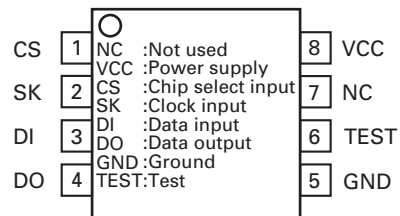
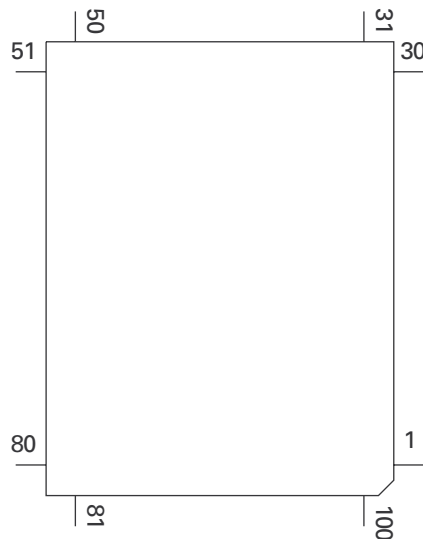
# **Pin Functions (PD2071A)**

Pin No.	Pin Name	I/O	Function and Operation
1	ECKO	O	External clock output
2	ECKI	I	External clock input
3	GNDX		Ground terminal for oscillator
4	GNDAL		Ground terminal( DAC L channel)
5	AOL	O	DAC analog signal output (L channel)
6	VRL		DAC L channel reference voltage terminal
7	VDAL		Power supply terminal (DAC L channel)
8	VDAR		Power supply terminal (DAC R channel)
9	VRR		DAC R channel reference voltage terminal
10	AOR	O	DAC analog signal output(R channel)
11	GNDAR		Ground terminal (DAC R channel)
12	GNDAC		Ground terminal (DAC C channel)
13	AOC	O	DAC analog signal output(C channel)
14	AOCT	O	DAC analog signal output with attenuator (C channel)
15	VRC		DAC C channel reference voltage terminal
16	VDAC		Power supply terminal (DAC C channel)
17	VRO	O	Attenuator reference voltage terminal (Buffer output)
18	VRI	I	Attenuator reference voltage terminal (Buffer input)
19	VDAS		Power supply terminal (DAC S channel)
20	VRS		DAC S channel reference voltage terminal
21	AOST	O	DAC analog signal output with attenuator (S channel)
22	AOS	O	DAC analog signal output (S channel)
23	GNDAS		Ground terminal( DAC S channel)
24	GND		Ground terminal
25-29	TP0-TP4	O	Test terminal (Open)
30	VDD		Power supply terminal
31	VDDR		Power supply terminal (for DLRAM)
32	GNDR		Grand terminal (for DLRAM)
33-40	TP5-TP12	O	Test terminal (Open)
41	FS	O	Clock output terminal (1 fs)
42	CKO0	O	Clock output 0
43	CKO1	O	Clock output 1
44	GND		Grand terminal
45	TP13	O	Test terminal (Open)
46	MCK	O	MCK clock output (256 fs / 512 fs / (384 / 768 fs))
47	VDD		Power supply terminal
48-53	TP14-TP19	O	Test terminal (Open)
54	CKS	I	Mater clock select input
55	STEP0	I	Action step select input 0
56	STEP1	I	Action step select input 1
57	RST	I	Reset input
58	VDD		Power supply terminal
59	SYNC	I	Program synchronizing signal input
60	ELRO	I	LR clock input for serial data output
61	ELRI	I	LR clock input for serial data input
62	EBCO	I	Bit clock input for serial data output
63	EBCI	I	Bit clock input for serial data input
64	DIN	I	Serial data input
65	DOUT	O	Serial data output
66,67	EM0,1	I	De-emphasis set up input
68-70	IFF0-2	I	Interface flag input
71	GND		Ground terminal
72	$\overline{CS}$	I	Chip select input
73	IFCK	I	Data shift clock input
74	IFDI	I	Data input
75	IFDO	O	Data output
76	IFOK	O	Operation flag output

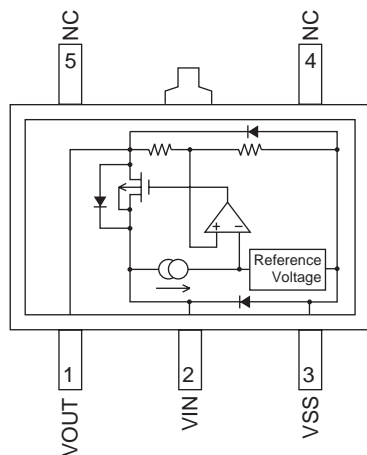
Pin No.	Pin Name	I/O	Function and Operation
77	ACK	O	Acknowledge output
78	ERR	O	Error flag output
79	I2CS	I	I2C bus select input
80	BOOT	I	Self boot control input
81,82	BA0-BA1	I	Boot address setup input
83	VDD		Power supply terminal
84-87	TST0-3	I	Test terminal (Open)
88	GND		Grand terminal
89	VSAL		Analog ground terminal (ADC L channel)
90	LIN	I	ADC analog signal input (L channel)
91	AVRL		ADC L channel reference voltage terminal
92	VDL		Analog power supply terminal (ADC L channel)
93	VDR		Analog power supply terminal (ADC R channel)
94	AVRR		ADC R channel reference voltage terminal
95	RIN	I	ADC analog signal input (R channel)
96	VSAR		Analog ground terminal (ADC R channel)
97	GNDX		Ground terminal
98	XI	I	Crystal oscillator connect terminal (Input)
99	XO	O	Crystal oscillator connect terminal (Output)
100	VDX		Power supply terminal for oscillator

\* PD2071A

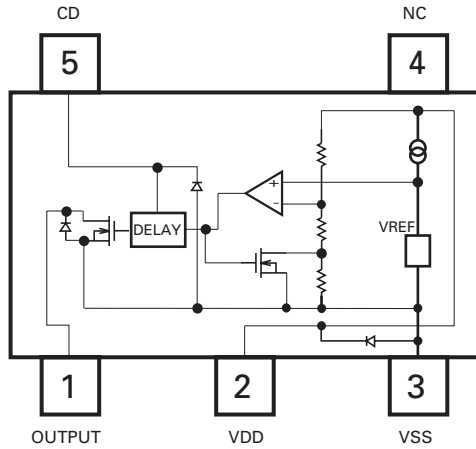
\* S-93C56BD0I-J8



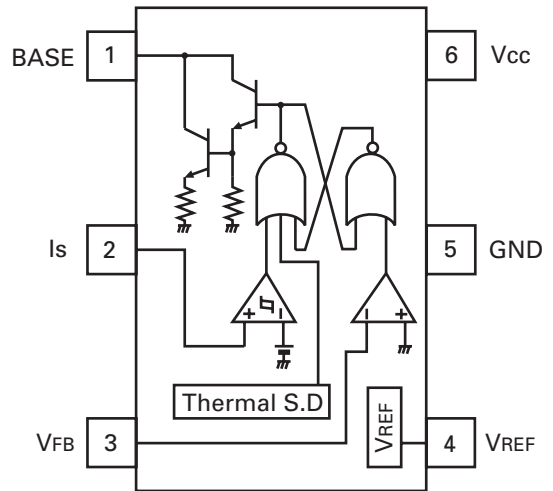
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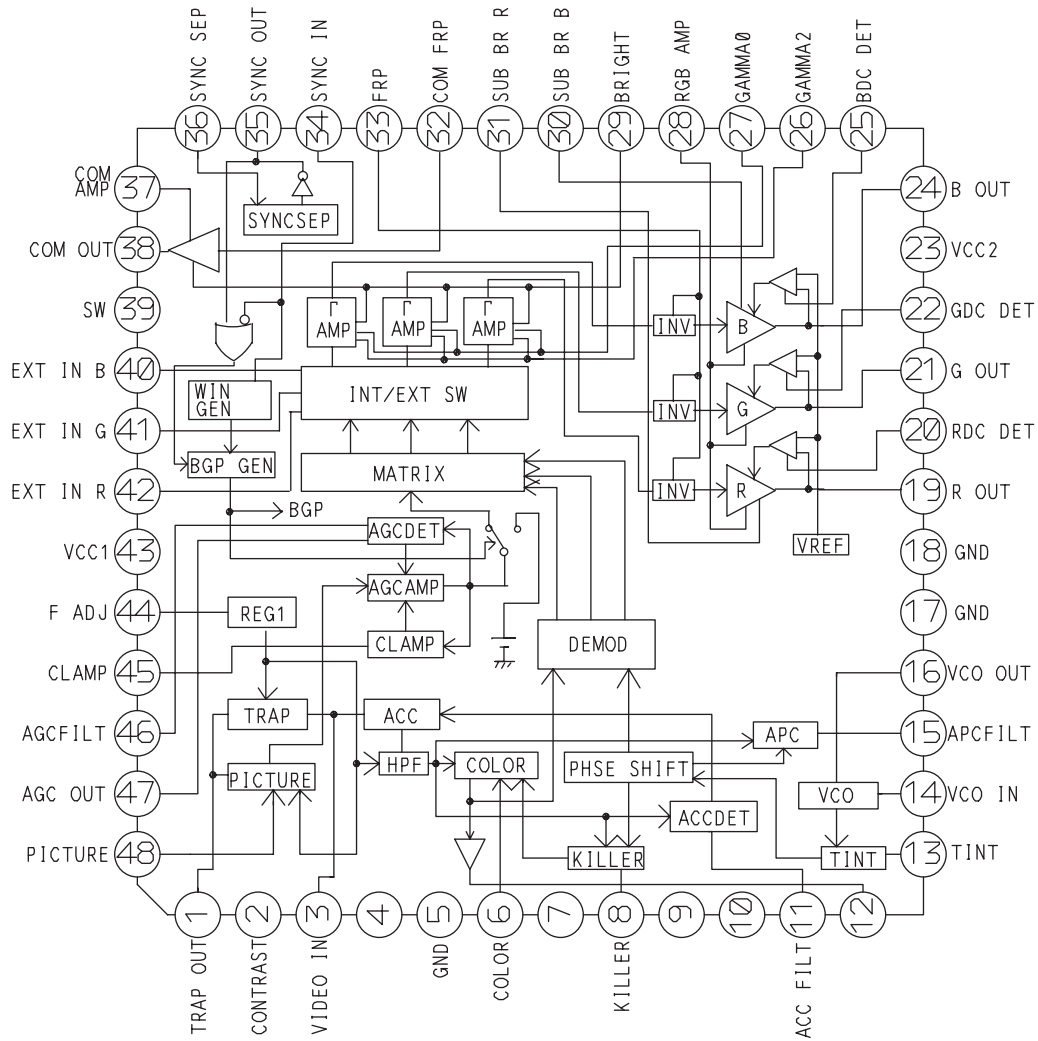
\* S-80942CNMC-G9C



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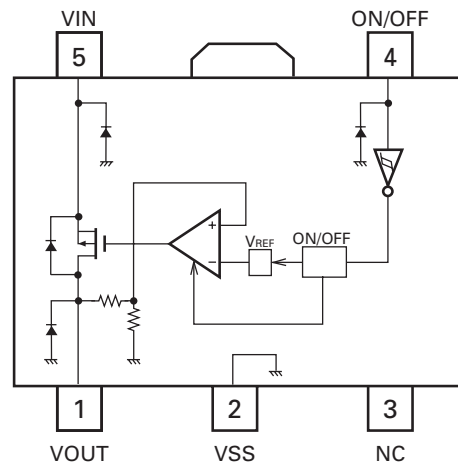
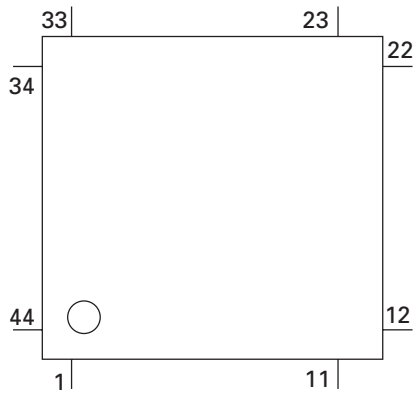


## ● Pin Functions (SM5903BFP)

Pin No.	Pin Name	I/O	Function and Operation
1	VDD2		Power supply terminal
2-6	UC1-UC5	I/O	Micro computer interface : Extension input / output
7	NC		Not used
8	NTEST	I	Test input
9	CLK	I	Clock input (16.9344MHz)
10	VSS		Ground terminal
11	YSRDATA	I	Audio : Serial data input
12	YLRCK	I	Audio : Serial LR clock input
13	YSCK	I	Audio : Serial bit clock input
14	ZSCK	O	Audio : Serial bit clock output
15	ZLRCK	O	Audio : Serial LR clock output
16	ZSRDATA	O	Audio : Serial data output
17	YFLAG	I	RAM over flow flag input from signal processing IC
18	YFCLK	I	Frame clock input
19	YBLKCK	I	Sub code block clock input
20	NRESET	I	System reset input
21	ZSENSE	O	Micro computer interface : Status output
22	VDD1		Power supply terminal
23	YDMUTE	I	Mute input
24	YMLD	I	Micro computer interface : Latch clock input
25	YMDATA	I	Micro computer interface : Serial data input
26	YMCLK	I	Micro computer interface : Shift clock input
27	A10	O	D-RAM : Address output
28	NCAS	O	D-RAM : $\overline{\text{CAS}}$ control output
29,30	D2,D3	I/O	D-RAM : Data input / output
31,32	D0,D1	I/O	D-RAM : Data input / output
33	NWE	O	D-RAM : $\overline{\text{WE}}$ control output
34	NRAS	O	D-RAM : $\overline{\text{RAS}}$ control output
35-40	A9-A4	O	D-RAM : Address output
41-44	A0-A3	O	D-RAM : Address output

SM5903BFP

S-818A33AUC-BGN



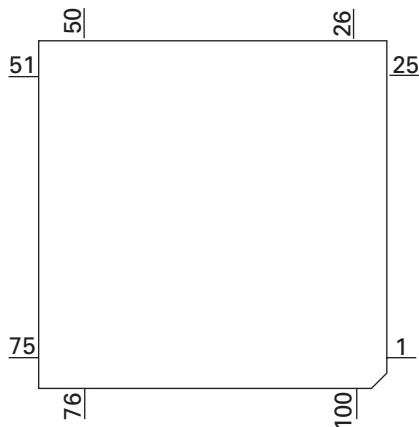


# **Pin Functions (PD5705B)**

Pin No.	Pin Name	I/O	Function and Operation
1	STSMO	O	STS test output
2	SPDLFG	I	Spindle FG pulse input
3	NC		Not used
4	NC		Not used
5	NC		Not used
6	BYTE	I	VCC connected
7	CNVSS	I	VSS connected
8	POWER	O	CD : +5V control output
9	CONT	O	CD : Servo driver control output
10	RESET	I	Reset input
11	XOUT	O	Crystal oscillating element connection pin
12	VSS1		GND
13	XIN	I	Crystal oscillating element connection pin
14	VCC		Back up 5V
15	NMI	I	Pull up
16	NC		Not used
17	BRST	I	P-BUS reset input
18	NC		Not used
19,20	NC	O	Not used
21	CAMOK	I	Cam operation sense 1 input
22	CAMLOAD	I	Cam operation sense 2 input
23	CAMCLMP	I	Cam operation sense 3 input
24	TESTIN	I	Test program start input
25	LOCK	I	CD : LSI spindle lock sense input
26	NC		Not used
27	BRXEN	I/O	P-BUS : Reception enable input/output
28	BSRQ	O	P-BUS : Serial pole request output
29	BSO	O	P-BUS : Serial data output
30	BSI	I	P-BUS : Serial data input
31	BSCK	O	P-BUS : Clock output
32	NC	O	Not used
33	XSO	O	CD : LSI data output
34	XSI	I	CD : LSI data input
35	XSCK	O	CD : LSI clock output
36	VDCONT	O	VD control output
37	LCCONT	O	LCD drive voltage select output
38-44	NC	O	Not used
45	STSSL	O	STS IC latch output
46	NC	O	Not used
47	XAO	O	CD : LSI data discernment control signal output
48	XSTB	O	CD : LSI strobe output
49	XRST	O	CD : LSI reset output
50	CCS	O	Compression IC chip enable output
51	EPCS	I/O	EEPROM detect input , Chip select output
52	FOK	I	CD : LSI focus OK signal input
53	ELVCONT	O	ELV drive voltage select output
54-58	NC	O	Not used
59	STSWAQV	O	STS test output
60	VCC		Power supply
61	STSDEC	O	STS test output
62	VSS2		GND
63	STSENC	O	STS test output
64	STSSTD	O	STS test output
65	STSSTC	O	STS test output
66	STSSTB	O	STS test output
67	STSSTA	O	STS test output
68-71	NC	O	Not used

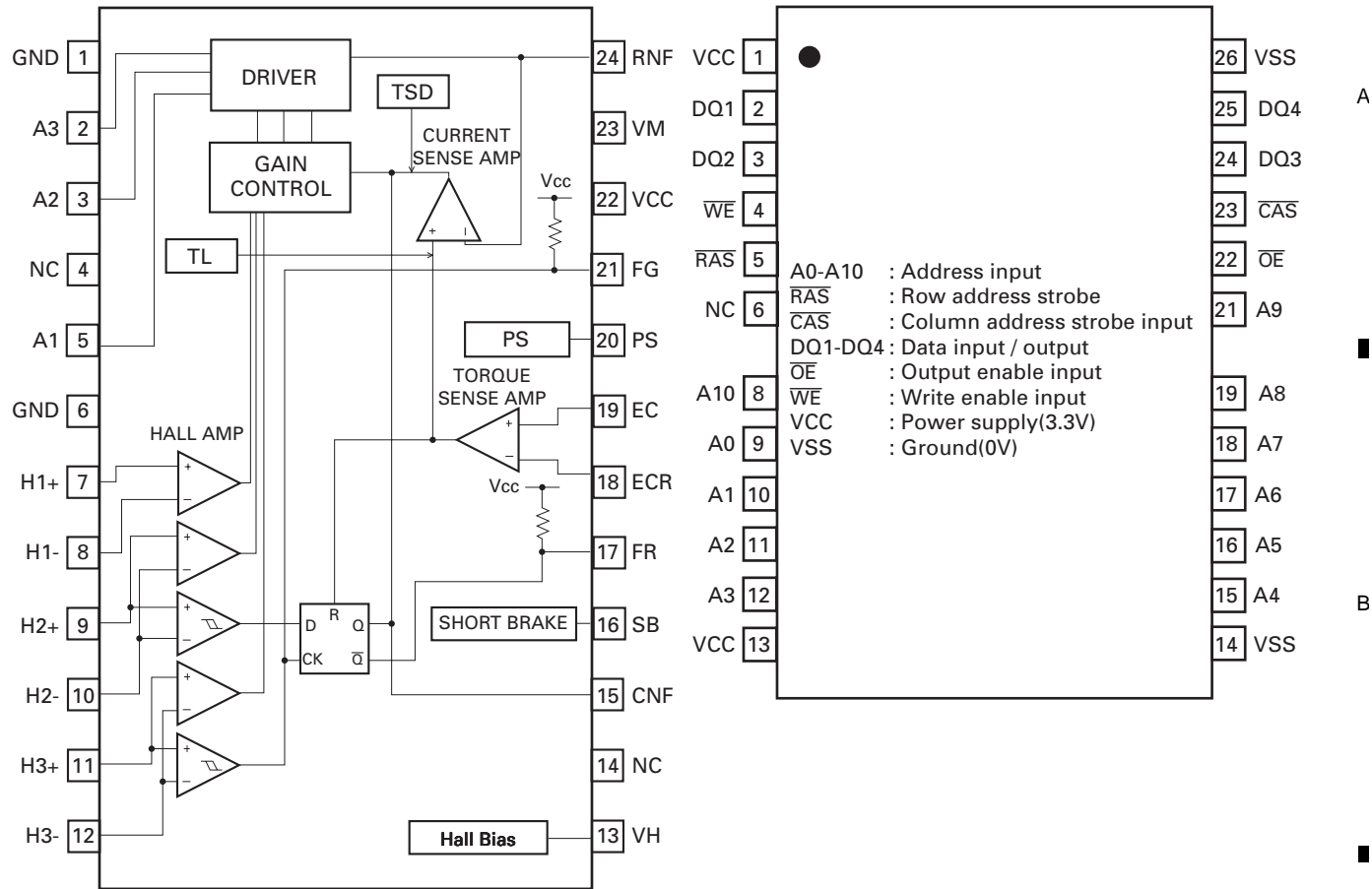
Pin No.	Pin Name	I/O	Function and Operation
72	HOME2	I	Disc clamp claw sense input
73	SBSY	I	Sub code synchronous interrupt signal input
74	CDMUTE	O	CD : Mute output
75	LO2	O	LOAD motor control 2 output
76	LO1	O	LOAD motor control 1 output
77	ELV2	O	ELV Motor control 2 output
78	ELV1	O	ELV Motor control 1 output
79	HOME	I	Carriage home switch input
80	STS16M	I	STS DRAM 4M/16M(H) select input
81	LOADSW1	I	LOAD operation sense 1 input
82	LOADSW2	I	LOAD operation sense 2 input
83,84	NC		Not used
85	ADENA	O	AVREF enable output
86	CG1	O	Cam motor 1 output
87	CG2	O	Cam motor 2 output
88	LOADVOL2	I	LOAD voltage sense 2 input
89	LOADPHT	I	LOAD operation photo sense input
90	LOMMON	O	Not used
91	ELVSENS	I	ELV position select input
92	EREFF		ELV sense reference voltage
93	TEMP	I	CD : Temperature sense input
94	AVSS		A/D converter ground potential
95	VDIN	I	CD : Power supply short sensor input
96	VREF	I	A/D converter reference voltage input
97	AVCC		A/D converter ground
98	STSSI	I	STS IC data input
99	STSSO	O	STS IC data output
100	STSSCK	O	STS IC clock output

\* PD5705B

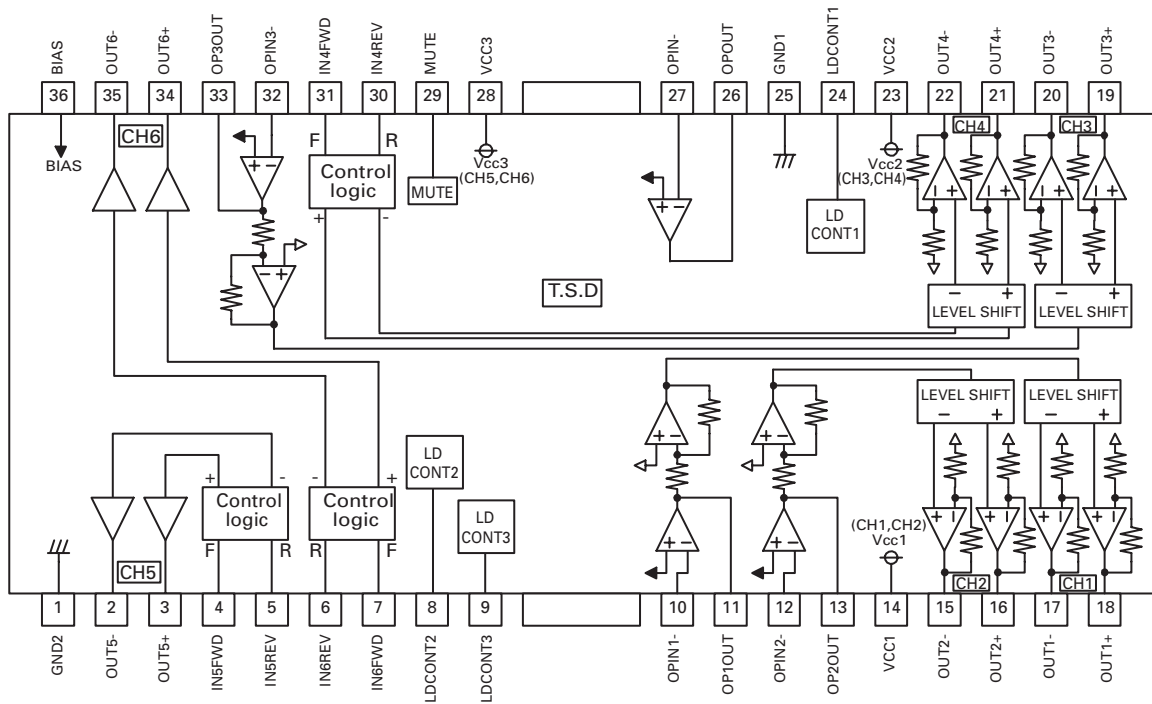


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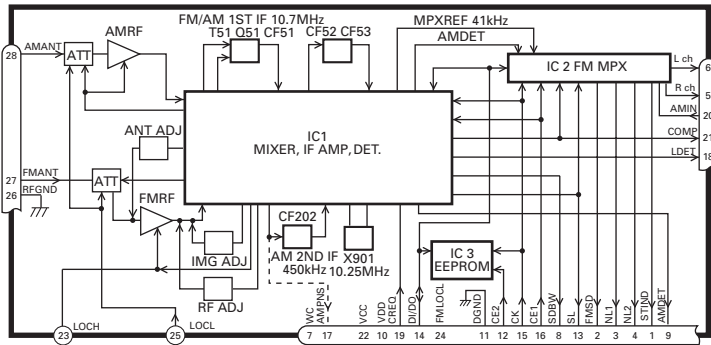
\* MSM51V17400F6TFT



BD7962FM



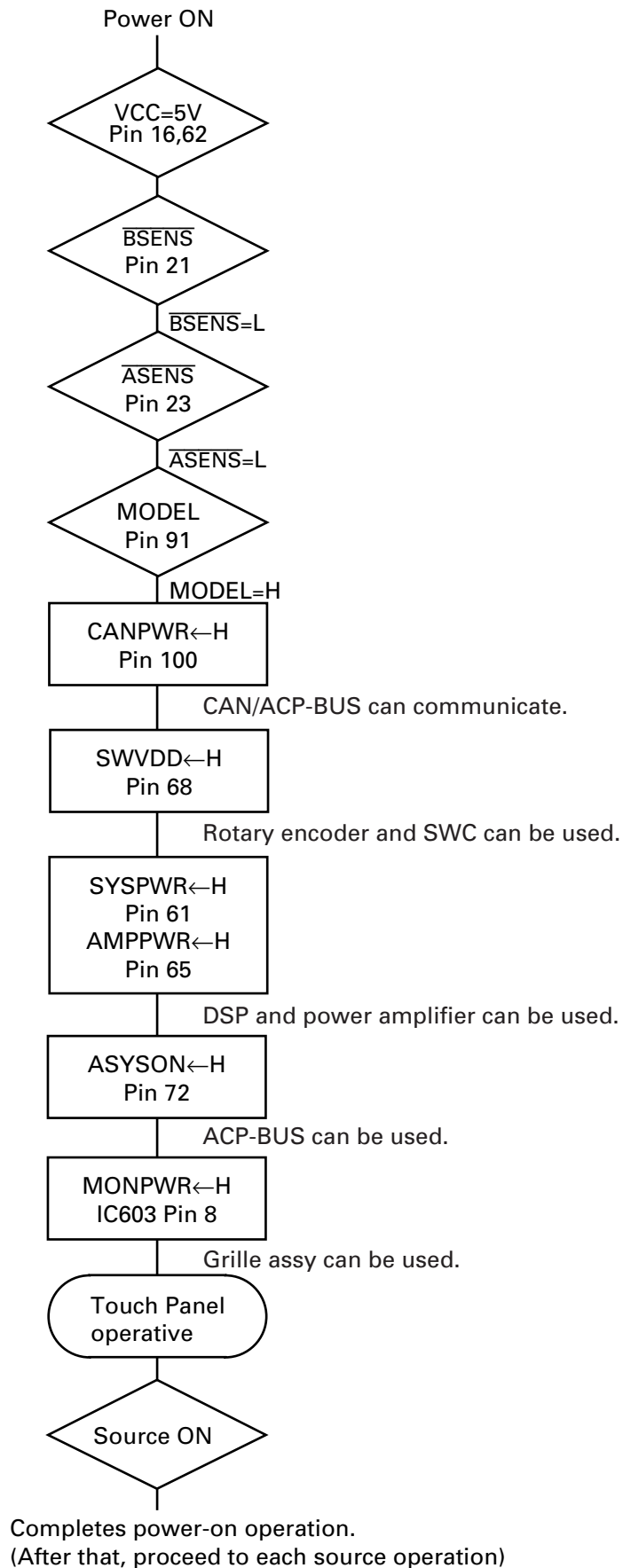
## FM/AM Tuner Unit



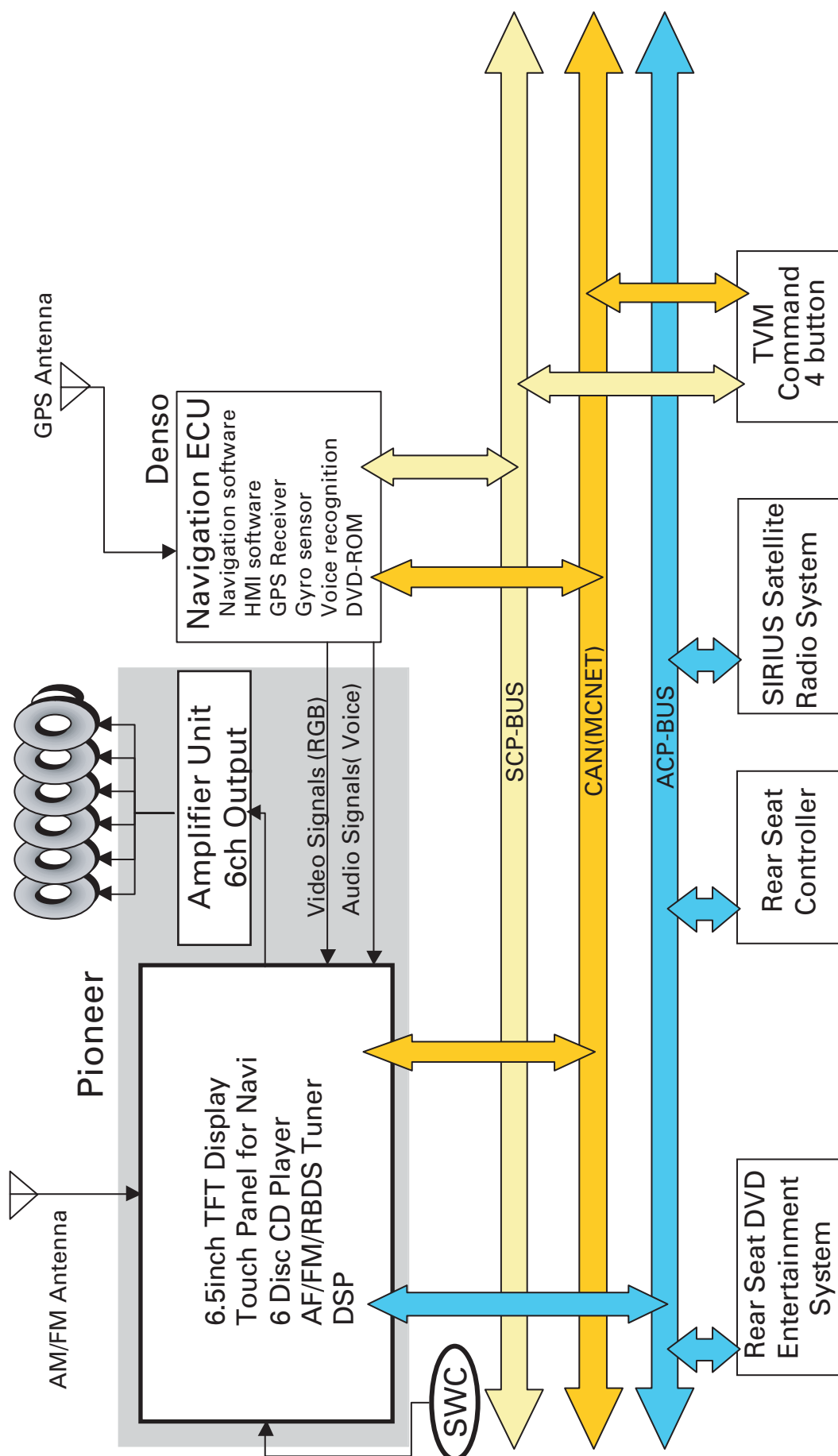
No.	Symbol	I/O	Explain	
1	STIND	O	stereo indicator	"Low" when the FM stereo signals are received. To be pulled up to the "VDD" at 47kΩ.
2	FMSD	O	FM station detector	"High" when signals are received. To be pulled up to the "VDD" at 47kΩ. Meanwhile, 10kΩ should be used when taking diver FIX trigger from here and "High: 0.9VDD or more" and "Low: 250mV or less". (Should satisfy the diver IC specifications)
3	NL1	O	noise level-1	"High" when noise is received. Output for the RDS. GND at 47kΩ//1,800pF.
4	NL2	O	noise level-2	"High" when noise is received. Output for the RDS. GND at 36kΩ//330pF.
5	Rch	O	R channel output	FM stereo "R-ch" signal output or AM audio output. Add the specified de-emphasis constant.
6	Lch	O	L channel output	FM stereo "L-ch" signal output or AM audio output. Add the specified de-emphasis constant.
7	WC		write control	EEPROM write control. Writing permissible at "Low". Normally open.
8	SDBW	O	SD bandwidth	SD bandwidth signal output. For detection of detuning data for the RDS.
9	AMDET	O	AM detector output	AM detector output. r out < 100Ω
10	VDD		power supply	Power supply pin for the digital section. DC 5V +/- 0.25V. Be careful about overlapping noise in the logic section.
11	DGND		digital ground	Grounding for the digital section.
12	CE2	I	chip enable-2	EEPROM chip enable. Active a "Low". To be pulled up to the "VDD" at 47kΩ
13	SL	I/O	signal level	Received FM/AM signal level (strength) output. Connect the specified load resistor and capacitor (10k Ω+ 39k Ω//4,700pF)
14	DI/DO	I/O	data input/ data output	Data input/Data output. To be pulled up to the "VDD" at 47kΩ
15	CK	I	clock	Clock input. To be pulled up to the "VDD" at 47kΩ
16	CE1	I	chip enable-1	AF·RF chip enable. Active at "High". To be grounded at 47kΩ
17	AMPNS	O	AM PNS IF signal	IF signal output for AM PNS circuit.
18	LDET	O	lock detector	Active at "Low". To be pulled up to the "VDD" at 47kΩ
19	CREQ	I	current request	Active at "Low". To be grounded at 47kΩ
20	AMINI		AM audio input	The frequency response and the level are set by connecting an external CR network with terminal AMIN as terminal AMDET. r in = 50kΩ
21	COMP	O	composite signal	FM composite signal output. r out < 100Ω
22	VCC		power supply	Analog section power supply pin. DC 8.4V +/- 0.3V
23	LOCH	I	local high	FM local high pin. When seeking local high, apply 5V together with "LOCL".
24	FMLOCL	I	FM local low	FM local low pin. When seeking local low, apply 5V to the base of the NPN transistor with which the specified resistor is being connected to the emitter. Keep it open in case of ordinary marketed models.
25	LOCL	I	local low	FM/AM local low pin. When seeking local low, apply 5V to the base of the NPN transistor. Since this pin is exclusive for AM when the FMLOCL is in use, do not drive it under FM.
26	RFGND		RF ground	Grounding for the antenna section.
27	FMANT	I	FM antenna input	FM antenna input. 75Ω. Surge absorber (DSP-201M-S00B) is necessary.
28	AMANT	I	AM antenna input	AM antenna input. High impedance. Connect to the antenna through an L (LAU type) of 4.7μH. To cope with the power transmission line hums, insert a series circuit consisting of an L (a coil of about 100mH) + R (a resistor of 470 Ω to 2.2kΩ) between the GND.

## 7.3 EXPLANATION

### 7.3.1 OPERATIONAL FLOW CHART



### 7.3.2 SYSTEM BLOCK DIAGRAM



## 7.4 NOTES ON SERVICING

### 7.4.1 CLEANING



Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

Portions to be cleaned	Cleaning tools
CD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

### 7.4.2 FACTORY SETTINGS

#### ● When the Repair is Complete

When the repair is complete, make the CD mechanism ready for transportation.

#### **Turing on "Shipment mode"** **(to prevent damage during shipment)**

- Remove all discs loaded in this product, before disconnecting the power supply connector(vehicle harness).



- Set this product to the "Shipment mode" and then disconnect the power supply connector before shipping.

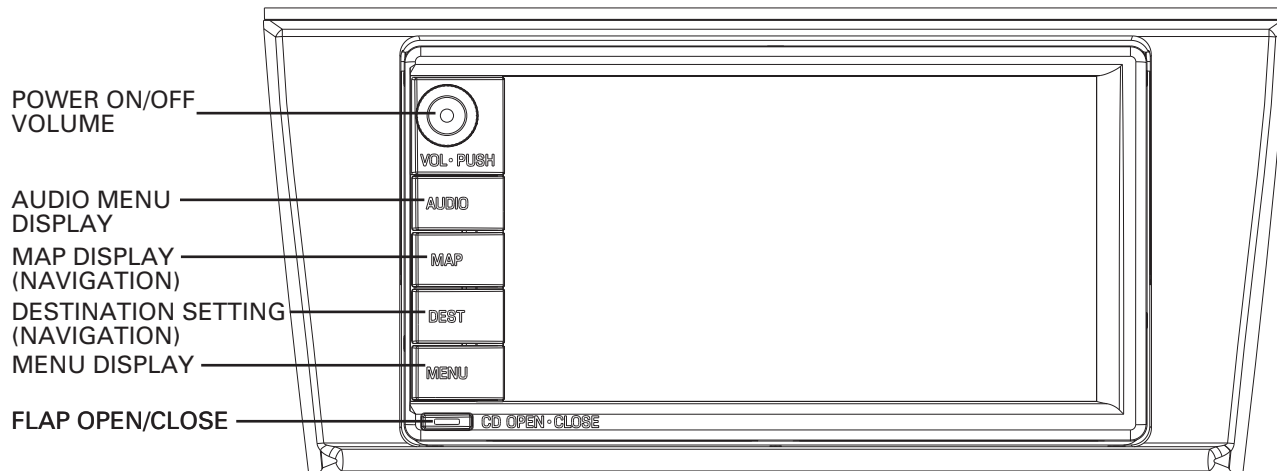


- Setting the "Shipment mode"  
Switch ACC OFF, and then, while simultaneously pressing the "AUDIO" and "DEST" buttons, switch ACC ON.

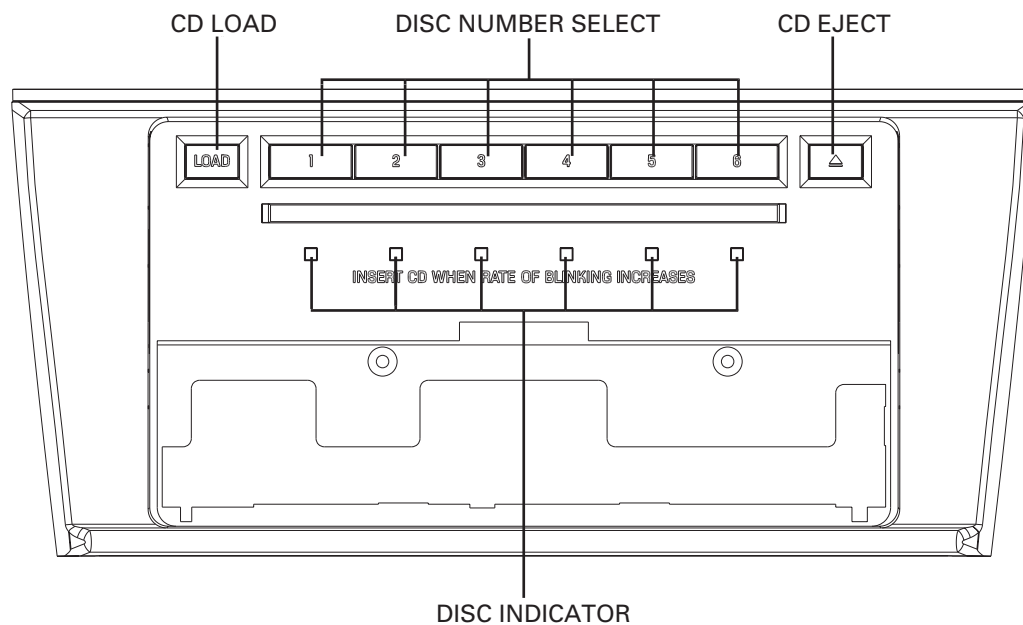
- Confirming "Shipment mode" setting  
When Shipment mode setting is completed, 5 beep sound can be heard from car speaker.

## 8. OPERATIONS

A



B



C

D